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PERSONAL.

Mr. O. A. Yoakum, of St. Louis, Mo., has been appointed General Traffic Manager of the Tennessee Central R. R.

Mr. William M. Stuart, of Detroit, Mich., has been appointed Chief of the Manufactures Division of the Census Bureau for 1900.

Mr. Samuel Rea, M. Am. Soc. C. E., First Assistant to the President of the Pennsylvania R. R., has been promoted to be Fourth Vice-President.

Mr. Stillman W. Wheelock, formerly with Park, Brother & Co., Ltd., has been appointed Sales Agent in charge of the Denver office of the Illinois Steel Co.

Mr. Fred. W. McNair, Professor of Mathematics and Physics of the Michigan College of Mines, at Houghton, Mich., has been elected President of that institution.

Mr. Lewis E. Bellows, of Holyoke, Mass., for the last nineteen years with the Deane Steam Pump Co., has resigned his position as Sales Manager of that company.

Major John L. Van Ornum, U. S. Vol. Engrs., Assoc. M. Am. Soc. C. E., has been elected Professor of Civil Engineering in Washington University, St. Louis, Mo.

Mr. William J. Carter, Assoc. M. Am. Soc. C. E., has been appointed Assistant Engineer in charge of Sewers and Drains in the Department of Public Works of Cleveland, O.

Mr. W. H. Reilly has been appointed Master Mechanic of the Fort Worth & Rio Grande Ry., with headquarters at Fort Worth, Tex., to succeed Mr. T. J. Shellhorn, resigned.

Mr. William H. Luster, Jr., has been elected City Surveyor of Elizabeth, N. J., to succeed the late William Colgan. He graduated from Rutgers College in 1884, and lately has been engaged on the New York state survey.

Mr. William A. Patton has been elected President of the New York, Philadelphia & Norfolk R. R. Co., to succeed Mr. Andrew J. Cassatt, who resigned upon being appointed President of the Pennsylvania R. R., as referred to in our last issue.

Mr. W. H. Marshall, Assistant Superintendent of Motive Power and Machinery of the Chicago & Northwestern Ry., has been appointed Superintendent of Motive Power of the Lake Shore & Michigan Southern R. R., vice Mr. G. W. Stevens, resigned.

Mr. G. E. Hoffmaster, for a number of years past General Manager of the New York Suburban Water Co., of Mount Vernon, N. Y., has accepted a position in the business department of the American Water-Works & Guarantee Co., of Pittsburg, Pa.

Mr. F. R. Pechin has been appointed Assistant Superintendent of the Wisconsin Division of the Chicago & Northwestern Ry., with headquarters at Milwaukee, Wis., to succeed Mr. W. D. Cantillon, who has been appointed Superintendent of the Winona & St. Peter Ry.

Rear-Admiral John G. Walker, U. S. Navy, has been elected President of the commission recently appointed by President McKinley to determine the most feasible route for a canal across the Isthmus of Panama. The personnel of the commission was given in our last issue.

Mr. W. C. Merriman, who was Engineer of the Buffalo improvements on the New York Central & Hudson River R. R. until that office was abolished last month, has been appointed Division Engineer of the West Virginia Short Line R. R., with headquarters at New Martinsville, W. Va.

Mr. Ira A. McCormack has been appointed General Superintendent in Charge of Operation of the Prospect Park & Coney Island R. R., which has been leased by the Brooklyn Heights R. R. Co. Mr. J. C. Brackenridge has been appointed Chief Engineer in Charge of Maintenance of Way, Buildings and Construction.

Sir William C. Van Horne has retired from his position as President of the Canadian Pacific Ry., and has been appointed Chairman of the Board of Directors, which is a new position. He was born in Illinois in 1843, and in 1856 became a telegraph operator on the Illinois Central R. R., going in 1858 to the Michigan Central R. R. and in 1864 to the Chicago & Alton R. R., where he became Division Superintendent in 1869. From 1872 to 1874 he was General Superintendent of the St. Louis, Kansas City & Northern Ry., then General Manager and President of the Southern Minnesota Ry. until the end of 1879, and in 1878-79 was also General Superintendent of the Chicago & Alton R. R. Throughout 1880 and 1881 he was General Superintendent of the Chicago, Milwaukee & St. Paul Ry., and in January, 1882, he went to the Canadian Pacific Ry. as General Manager. In 1884 he was made Vice-President and General Manager, and in 1888 he became President, and was Knighted by the Queen.

Mr. J. N. Chester, Assoc. M. Am. Soc. C. E., of Brooklyn, N. Y., for several years connected with the sales department of Henry R. Worthington, has accepted a position with the engineering department of the American Water-Works & Guarantee Co., of Pittsburg, Pa. The company controls and operates many water-works plants throughout the United States.

Mr. Thomas G. Shaughnessy, Vice-President of the Canadian Pacific Ry., has been appointed President, to succeed Sir Wm. C. Van Horne, who has retired. He was born in Milwaukee in 1853, entered the service of the Chicago, Milwaukee & St. Paul Ry. in 1869, and became General Storekeeper in 1879. In 1882 he was appointed General Purchasing Agent of the Canadian Pacific Ry., Assistant General Manager in 1885, Assistant President in 1889, and Vice-President in 1891.

A number of important changes will be made in the Transportation Department of the Baltimore & Ohio R. R. in July. The position of General Superintendent of the Trans-Ohio lines, now held by Mr. J. M. Graham, will be abolished, and the jurisdiction of General Superintendent Thomas Fitzgerald will be extended over the main line from Philadelphia to Chicago, including its branches. Mr. Graham will become Chief Engineer, with headquarters at Baltimore, succeeding Mr. W. T. Manning, who resigned on March 10, with Mr. P. H. Irwin as Assistant. The jurisdiction of Mr. John E. Spurrier, Superintendent of First Division and branches, with headquarters at Baltimore, will be extended over the Second Division. Mr. F. A. Husted, Superintendent of the Middle Division, will have the Third, Fourth and Fifth divisions, with headquarters at Grafton, W. Va. Mr. R. M. Sheats, Superintendent of the Fourth and Fifth divisions, will be Superintendent of the Chicago terminals. Mr. T. J. English, Superintendent of the Chicago Division, will have the Ohio and Midland divisions, with headquarters at Newark, Ohio, vice Mr. J. H. Glover, assigned to other duties. Mr. F. C. Batchelder, of the Soo Line, will be Superintendent of the Chicago Division, with headquarters at Garrett, Ind. Mr. Charles Galloway, Train Master of the First Division, will be Assistant Superintendent of the First and Second divisions, with headquarters at Cumberland, Md.

Rear-Admiral George W. Melville, Engineer in Chief of the United States Navy, received on June 7, 1899, the Honorary Degree of Master of Science from Columbia University, New York. In introducing the Admiral to the President of the University, during the Commencement Exercises, Professor F. R. Hutton, Head of the Department of Mechanical Engineering, spoke in part as follows.

Mr. President: I am to present to you Rear-Admiral George W. Melville, Engineer in Chief of the United States Navy, who has been named by the Trustees for the Honorary Degree of Master of Science. It is significant that this degree is given to-day for the first time in the history of the University and that its award should be to one to whom the honor is so singularly fitting.

I present you Admiral Melville as a Master of Science, both in that field where knowledge for its own sake is its own exceeding great reward, and also in that where the Mechanical Engineer leaves the impress of his thought and creative energy upon concrete achievements in iron and steel.

I bring you, sir, one who has made himself, in the first place, an authority and expert upon Arctic exploration. This knowledge has been acquired in service as an officer, first upon the "Tigress" in the search for a part of the crew of the "Polaris," later as Engineer Officer of the "Jeannette" under Lieut. De Long, and finally with the relief party which went to rescue Greely with the "Thetis" and the "Bear."

I turn to the achievements of Admiral Melville in that other field where as Mechanical Engineer he has impressed himself upon the engineering of the Navy of our country. Melville is now serving as Engineer in Chief of the United States Navy for his third term. When he was appointed in 1888, the only modern vessels in commission were the "Atlanta," the "Boston" and the "Dolphin," two cruisers and a dispatch boat. The twelve years of his service have enabled him as Bureau Chief to be responsible for the design and engineering of 120 ships, aggregating 700,000 HP. Beginning with the "San Francisco," the earliest American-designed vessel of our modern Navy, his sound mechanical judgment, his boldness, and his progressiveness have culminated in the "Columbia" and the "Minneapolis," each triple-screw giants, each holding for a time the world's record for speed.

But, sir, lest I weary with technical detail, I pass to a final reference, to that upon which Columbia to-day bases her need of praise. I refer, sir, to the significance in the war of 1898 which belongs to the preparation and the achievements of the Navy in the Spanish-American conflict. The conception of a floating machine-shop, whereby vessels could be outfitted and repaired a thousand miles from a shore basis and a navy yard, and the development of economical distilling ships whereby a large body of men and vessels on blockade could be supplied with fresh water without the necessity of touching a hostile shore, and the condition of the engineering departments of our vessels when the hour of battle had struck, give Admiral Melville's leadership a significance which we are glad to honor.

OBITUARY.

Mr. J. Fred Moore, formerly City Engineer of Waltham, Mass., died at his home in that city on June 18.

Col. George C. Boynton, Treasurer of the Columbian Iron Works, of Baltimore, Md., died at Bristol, R. I., on June 17, aged 50 years.

Capt. George W. Coffin, U. S. Navy, retired, is reported to have died at the Yokohama Naval Hospital. He graduated from the Naval Academy in 1863. In 1884 he commanded the "Alert" on the Greely relief expedition, and became Secretary of the Lighthouse Board in 1889. He became a Captain in 1893, and on Sept. 15, 1897, was placed on the retired list.

Mr. Hilary J. Brunot, a civil engineer and one of the pioneers in the natural gas business of Pennsylvania, died at his home in Greensburg, Pa., on June 10, aged 75 years.

Mr. George W. Phelps, builder and principal owner of the Avon, Genesco & Mount Morris R. R., which now forms a branch of the Erie R. R., died at Mount Morris, N. Y., on June 9, aged 79 years.

Rear-Admiral Pierce Crosby, U. S. N., retired, died in Washington, D. C., on June 15, aged 76 years. He entered the navy in 1838 as a midshipman, and served on the "Decatur" in the Mexican War. During the Civil War he was Fleet Captain of the North Atlantic Squadron under Admiral Lee.

Mr. Charles Baldwin Thurston died at his home in Jersey City, N. J., on June 14, aged 67 years. He was connected with the Pennsylvania R. R., and was the President of the Fayetteville Water, Light & Power Co. of North Carolina, the Jersey City Chain Works Co., the Richmond & Bergen Point Ferry Co., and the Millstone & New Brunswick R. R. Co., and was a member of the boards of several other corporations.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
June 26-28. Annual meeting at Boston, Mass. Secy., Ralph W. Pope, 26 Cortlandt St., New York city.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
June 27-30. Annual meeting at Cape May, N. J. Secy., Chas. W. Hunt, New York city.

CANADIAN ELECTRICAL ASSOCIATION.
June 28-30. Annual meeting, Hamilton, Ont. Secy., C. H. Mortimer, Confederation Life Bldg., Toronto, Canada.

MONTANA SOCIETY OF ENGINEERS.
July 8. Butte, Mont. Secy., A. S. Hovey, Nat'l Bank Bldg., Helena, Mont.

THE LOUISIANA ENGINEERING SOCIETY.
July 10. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

WISCONSIN STATE CHEMICAL ASSOCIATION
July 13. Secy., I. Ladoff, 154 Knapp St., Milwaukee, Wis.

INTERNATIONAL ASSOCIATION FOR TESTING MATERIALS, AMERICAN SECTION.
Aug. 15, 16. Annual meeting at Pittsburg, Pa. Secy., Richard L. Humphrey, City Hall, Philadelphia, Pa.

SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION.
Aug. 17-19. Annual meeting, Columbus, O. Secy., Albert Kingsbury, Durham, N. H.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.
Aug. 21-26. Annual meeting at Columbus, O. Secy., Prof. Frederick Bedell, Ithaca, N. Y. Local Secy., Prof. B. F. Thomas, Columbus, O.

EASTERN MAINTENANCE OF WAY ASSOCIATION.
Sept. 26. Portland, Me. Secy., F. C. Stowell, B. & M. R. R., Ware, Mass.

FRANKLIN INSTITUTE.—A paper on "Water Power Electrical Plants in the United States" was read before the Electrical Section on June 13, by Mr. B. C. Washington, Jr., of Washington, D. C.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.—The work of the association will be continued throughout the summer, but will consist of visits to irrigation, harbor, beet sugar and other works.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—The preliminary announcement of the 48th annual meeting of the association, and of the several affiliated scientific societies, has been issued. The meeting will be held at Columbus, O., Aug. 21-26. Prof. Frederick Bedell, Ithaca, N. Y., is Secretary of the association, and Prof. B. F. Thomas, Columbus, O., is Local Secretary. The following affiliated national societies will hold meetings before or during the meeting of the association: Forestry, Geological, Chemical, Agricultural Science, Economic Entomologists, Mathematical, Engineering Education, Folk-Lore, Botanical and Microscopical.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
June 22.	Brick paving, Salamanca, N. Y.		June 15
	Advertised, Engineering News, June 15.		
June 24.	Electric plant, Newport, R. I.		May 25
	Advertised, Eng. News, May 25 to June 15.		
June 24.	Stone roads, Long Branch, N. J.		June 15
	Advertised, Engineering News, June 15.		
June 24.	Navy yard buildings, New York, N. Y.		June 15
June 24.	Heating plant, Boston, Mass.		June 22
June 24.	Bridges (3), Greenfield, Ind.		June 22
June 26.	Rubble stone, Boston, Mass.		June 1
	Advertised, Eng. News, June 1 to 22.		
June 26.	Excavation, Buffalo, N. Y.		June 1
	Advertised, Eng. News, June 1 to 22.		
June 26.	Artesian well, Tarboro, N. C.		June 15
	Advertised, Eng. News, June 15 and 22.		
June 26.	Asphalt paving, Cortland, N. Y.		June 15
	Advertised, Eng. News, June 15 and 22.		
June 26.	Water pipe, valves, etc., Kewanee, Ill.		June 22
June 26.	Rebuilding monument, Springfield, Ill.		June 22
June 26.	Penitentiary building, Jamesville, N. Y.		June 22
June 26.	School buildings (2), Washington, D. C.		June 22
June 26.	School buildings, etc., New York.		June 22
June 27.	Tainter gates, St. Paul, Minn.		June 1
	Advertised, Eng. News, June 1 to 22.		
June 27.	Fire bell, etc., Hoboken, N. J.		June 22
June 27.	Court house, Centerville, Mich.		June 22
June 27.	Gravel road, Asbury Park, N. J.		June 22
June 27.	Paving, Jersey City, N. J.		June 22
June 27.	Hospital buildings, Norristown, Pa.		June 22
June 27.	Park shelters, etc., Newark, N. J.		June 22
	Advertised, Engineering News, June 22.		
June 28.	Dredging, Boston, Mass.		June 1
	Advertised, Eng. News, June 1 to 22.		
June 28.	Electric plant, St. Paris, O.		June 8
	Advertised, Eng. News, June 1 to 15.		
June 28.	Lanterns (3), Tompkinsville, N. Y.		June 15
	Advertised, Eng. News, June 15 and 22.		

June 28. Reservoir, West Point, Neb. ..... June 15
June 28. Garbage plant, Lancaster, Pa. ..... June 15
June 28. Brick paving, Norwich, N. Y. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 28. Masonry arches, Cleveland, O. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 28. Main sewer, Princeton, Ill. ..... June 22
June 28. Electric plant, Boston, Mass. ..... June 22
June 28. Pike roads, Vernon, Ind. ..... June 22
June 29. Random stone, Key West, Fla. ..... June 1
Advertised, Eng. News, June 1 to 22.
June 29. Dredging, Tampa, Fla. ..... June 1
Advertised, Eng. News, June 1 to 22.
June 29. Wall—Channel, Albany, N. Y. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 29. Heating, electric lighting, etc., New York. June 22
June 29. Filter basin, etc., Phoenixville, Pa. ..... June 22
Advertised, Eng. News, June 22 and 29.
June 29. Bridge, Cape May, N. J. ..... June 22
Advertised, Engineering News, June 22.
June 30. Electric r'y (25 miles), Shanghai, China. Mar. 2
Advertised, Eng. News, Nov. 17 to Dec. 8.
June 30. Barges (6), New Orleans, La. ..... June 8
Advertised, Eng. News, June 8 to 22.
June 30. Sewers, Marshall, Mich. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 30. Dredging, Cleveland, O. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 30. Water-Works, Chapel Hill, N. C. ..... June 15
Advertised, Engineering News, June 15.
June 30. Water and electric plants, Belgrade, Minn. June 15
June 30. Water and sewer systems, Walker, Minn. June 15
June 30. Engine for electric plant, Prescott, Ont. June 22
June 30. Water-works, Michigan City, Ind. ..... June 22
Advertised, Eng. News, June 22 and 29.
June 30. Brick sewer, Troy, N. Y. ..... June 22
June 30. Municipal building, Groton, N. Y. ..... June 22
July 1. Revetments, Duluth, Minn. ..... June 1
Advertised, Eng. News, June 1 to 22.
July 1. Sewers, Larchmont, N. Y. ..... June 15
Advertised, Engineering News, June 15.
July 1. Paving, Wooster, O. ..... June 15
July 1. Viaduct, Fort Worth, Tex. ..... June 15
July 1. Bridge, Wood River, Neb. ..... June 15
July 1. Bridge, Abbott, Neb. ..... June 15
July 1. Bridges (2), Montesano, Wash. ..... June 15
July 1. Roof for building, New York, N. Y. ..... June 22
July 1. School building, Yonkers, N. Y. ..... June 22
July 1. Paint shop, etc., Port Royal, S. C. ..... June 22
July 1. Public building, Chicago, Ill. ..... June 22
July 1. Bridge, Coatesville, Pa. ..... June 22
July 1. Bridges (2), Cooperstown, N. Dak. ..... June 22
July 1. Laying water mains, Livermore Falls, Me. June 22
July 3. Plans for kursaal, Harrogate, England. May 18
July 3. Water softening plant, Winnipeg, Man. May 25
July 3. Levee work, Memphis, Tenn. ..... June 8
Advertised, Eng. News, June 8 to 29.
July 3. Bridge, Hornellsville, N. Y. ..... June 15
Advertised, Eng. News, June 1 and 8.
July 3. Water-works castings, Cincinnati, O. ..... June 15
July 3. Turnpike road, Maynardville, Tenn. ..... June 15
July 3. Block paving, Toledo, O. ..... June 15
July 3. School building, Coshocton, O. ..... June 22
July 3. Bridge, Port Orchard, Wash. ..... June 22
July 3. Paving, Binghamton, N. Y. ..... June 22
July 3. Bridge, San Jose, Cal. ..... June 22
July 3. Bridges (10), Kentland, Ind. ..... June 22
July 3. Tubular boilers (3), Columbus, O. ..... June 22
July 3. Pumping engine, Grand Forks, N. Dak. ..... June 22
July 3. Paving and sewers, Rome, N. Y. ..... June 22
Advertised, Eng. News, June 22 and 29.
July 4. Paving and sewers, Marion, Ind. ..... June 22
July 5. Supplies, Memphis, Tenn. ..... June 8
Advertised, Eng. News, June 8 to 29.
July 5. Drainage system, New Orleans, La. ..... May 4
Advertised, Eng. News, May 4 to June 29.
July 5. School building, Barbersville, Ind. ..... June 15
July 5. Sewers, Cohoes, N. Y. ..... June 22
Advertised, Engineering News, June 22.
July 5. U. S. building work, Minneapolis, Minn. ..... June 22
July 5. Steel bridges (5), Fowler, Ind. ..... June 22
July 5. Brick paving, Chillicothe, O. ..... June 22
Advertised, Engineering News, June 22.
No date. Electric plant, Seymour, Ia. ..... June 22
Advertised, Engineering News, June 22.
" Electric railway (30 mls), Indianapolis, Ind. June 22
" Artesian well, Fort Gaines, Ga. ..... June 22
" Steel bridge, Kane, Pa. ..... June 22

RAILWAYS.

ARIZONA & UTAH.—S. B. McConnico, Vice-Pres. and Gen. Mgr., Kingman, Ariz., informs us that 18 miles of this line have been built, and that the balance is under contract to Kenefick & Lusk, 33 Wall St., New York. The route is from Kingman to White Hills, via McConnico and Chloride, 50 miles. F. L. Underwood, Pres., 31 Nassau St., New York; H. M. McCartney, Ch. Engr., Kingman.

CHATTAHOOCHEE VALLEY.—A. C. Smith, West Point, Ga., informs us that bids are now being received for constructing an extension between Lanett and Riverdale, via Langdale, 35 miles. The right of way has been obtained and the capital secured. L. Lanier, Pres., West Point.

CHESAPEAKE & OHIO.—Contracts have been let, according to reports, for double tracking the section of this line between Clifton Forge, Va., and Huntington, W. Va. The D. Shanahan Sons Co., of Louisville, Ky., are about to commence the erection of a steel viaduct and a station at Richmond, Va., to cost $3,000,000. Other extensive improvements are being planned. H. Pierce, Engr. Maintenance-of-Way, Huntington, W. Va.

DENVER, KINGFISHER & GULF.—Incorporated in Oklahoma June 8 with $1,000,000 capital stock, to construct a line from Denver east to Kiowa, Kingfisher and Sabine Pass, Tex. F. L. Winkler, W. F. Bart and J. A. Overstreet, of Kingfisher, Okla., are directors.

EDDYSTONE & DELAWARE RIVER.—Incorporated in Pennsylvania June 12 with $50,000 capital stock, to construct a steam railway in Delaware county. Lincoln Godfrey, Pres., Radnor, Pa.; Wm. P. Simpson, Overbrook, Pa.; and John W. Fraley, New York, are incorporators.

GREENWICH & JOHNSONVILLE.—This company has decided to extend its line to Middle Falls, N. Y., a distance of about 2 miles. Henry Gray, Greenwich, N. Y.

KANSAS, OKLAHOMA CENTRAL & SOUTHWESTERN.—We are informed that work is being pushed on this branch of the Atchison, Topeka & Santa Fe Ry. between Caney, Kan., and Bartlesville, Ind. Ter. Steel has been laid from Caney south to Cotton Creek, and it is expected to reach Bartlesville in July, provided that high water does not interfere with the bridge work. B. J. Dalton, Ch. Engr., Caney, Kan.

MANHATTAN & JERSEY CITY.—Incorporated in New York June 16 with $10,000 capital stock, to construct one mile of railway through a tunnel under Hudson River from New York to Jersey City or Hoboken, N. J. Ernest C. Moore, 130 Pearl St.; H. W. Brinckerhoff, and Oliver Hull, New York, are incorporators.

MISSOURI PACIFIC.—A company has been organized at Perry, Okla., according to reports, to build an extension of the Roper and Peru branch of this line in Kansas, south through Pawhuska, Ind. Ter., to Perry.

PEORIA & ST. LOUIS.—Dwight L. Wing, Springfield, Ill., the promoter of this railway, is taking active steps toward constructing the proposed line from Peoria to Springfield, Ill., 55 miles. E. F. Harper, Engr., East St. Louis, Ill.

RAQUETTE LAKE.—About 600 men are reported to be at work on this new line of railway from Clearwater, N. Y., on the Mohawk & Malone branch of the New York Central & Hudson River R. R., to Brown's Tract Inlet on Raquette Lake. The road is graded to Eagle Bay, on Fourth Lake, about one-half the distance, and it is expected to complete the work by Aug. 1. J. W. & E. Whalen, Whitehall, N. Y., are the contractors.

SERVIA.—Edward Calthorp and D. Markus, London, England, are reported to have received a concession from the Servian government to build and operate six railways. Work must begin within two years, and be completed within nine years.

TEXAS.—The Clark & Boice Lumber Co., Jefferson, Tex., contemplates the construction of a railway from Jefferson to Linden. Address C. H. Nelson, Linden.

TEXAS & PACIFIC.—This company is about to build an extension of its line from Port Allen to New Rhodes, La., about 25 miles. Part of the contracts have been let. B. S. Wathen, Ch. Engr., Dallas, Tex.

TEXAS CENTRAL.—C. Hamilton, Vice-Pres. and Gen. Mgr., Waco, Tex., informs us that the location has been completed, the right of way obtained and capital secured for building the extension from Albany to Stamford, Tex., 40 miles. The contract for grading has been let to Ricker, Lee & Co., Galveston, Tex.; for masonry, to R. L. Newman and J. M. Ackerman; for ties to William Cameron, and for steel bridges to the Edge Moor Bridge Works, Wilmington, Del. H. K. McHarg, Pres., New York.

TIFTON, THOMASVILLE & GULF.—The Union Lumber Co. is constructing this proposed line from Tifton, Ga., towards Thomasville, and expects to complete 56 miles of line this year. F. J. Ansley, Secy., Tifton.

TRENTON, LAWRENCEVILLE & PRINCETON.—We are informed that the second section of this new line of steam railway, or between Lawrenceville and Stony Brook, N. J., a distance of 4.55 miles, was let on June 20 to M. Hurley, Trenton, N. J. The route is from Trenton to Princeton, via Ewing, Lawrenceville and Rosedale. The total length now let and under construction is 9½ miles. J. L. Branson, Pres., Langhorne, Pa.; E. G. Weir, Ch. Engr., Trenton, N. J.

WADLEY & MOUNT VERNON.—This company has announced its intention to apply for authority to extend its line from Wadley, northeast to Augusta, Ga., 55 miles, and from Rixville, southwest to Valdosta, Ga., 140 miles. T. J. James, Pres., Wadley, Ga.

YANKTON, NORFOLK & SOUTHERN.—J. S. Meckling, Chicago, Ill., is said to be making arrangements for financiering a construction company to build this proposed line from Yankton, S. Dak, to Omaha, Neb., 180 miles; estimated cost, $2,700,000. About 45 of the 75 miles between Yankton and Norfolk, Neb., have been graded and bridged, and is owned by W. W. Graham, Norwalk, O.

STREET AND ELECTRIC RAILWAYS.

PORTLAND, ME.—The Portland R. R. Co. has filed an application with the railroad commissioners for permission to extend its Cape Elizabeth branch to Saco, a distance of 14 miles. E. A. Newman, Secy. and Mgr.

LEXINGTON, MASS.—The Lexington & Boston St. Ry. Co. has been chartered, with $170,000 capital stock, to build from Arlington Heights through Lexington and Bedford to Billerica, 17 miles. C. W. Smith, Treas.

RANDOLPH, MASS.—The selectmen granted a franchise June 14 to the Stoughton & Randolph St. Ry. Co.

MONTVILLE, CONN.—Peck, Williams & Co., Norwich, Conn., are reported to have been awarded the contract for erecting the new car houses and power house for the Montville St. Ry. Co., at Thamesville.

SOUTHINGTON, CONN.—Work began in this town, June 14, on the grading for the proposed extension of the Central Ry. & Electric Co.'s line from Plainville to Southington. F. G. Platt, Treas., New Britain, Conn. The contract is held by F. T. Ley & Co., Springfield, Mass.

NIAGARA FALLS, N. Y.—The council granted a franchise to the Niagara Falls St. Ry. Co., June 12, to construct a crosstown line from the upper power district to the property of the Highlands Land Co. in the northeastern part of the city. J. L. Simmons, Vice-Pres., Gluck Bldg., Niagara Falls.

OSWEGO, N. Y.—The Oswego Traction Co. has been organized, with $300,000 capital stock, by S. M. Coon, D. B. Page, Oswego; C. C. Cook, New York, and others.

SCHENECTADY, N. Y.—The Schenectady Ry. Co. has been granted a franchise to extend its line through Nott Terrace, Union St. and Union Ave. Theo. Stebbins, Mgr.

HOBOKEN, N. J.—The New Jersey Electric Ry. is reported to have been sold at Secaucus, N. J., to Chanler Kiker, Newark, N. J., for $1,500,000. The system comprised the Jersey City, Hoboken & Rutherford Electric Ry., the Paterson, Passaic & Rutherford Electric Ry., and the Paterson Central Electric R. R., operating 60 miles of line.

MORRISTOWN, N. J.—The Morris County Traction Co. has been incorporated, with $250,000 capital stock, to build a trolley line from Caldwell to Morristown, and ultimately to Lake Hopatcong. John H. Copstick, Montville, N. J.; Robert D. Foote, Morristown, and George W. Stickle, Rockaway, N. J., are incorporators.

NEWARK, N. J.—The White Line Traction Co. was incorporated June 9, with $4,000,000 capital stock, with $25,000 paid in, to construct and operate lines in New Jersey. Fred. W. Egner, Edward A. Pruden and George Barker, 763 Broad St., Newark, are incorporators.

PATERSON, N. J.—Albert A. Wilcox, Paterson, bought the property of the Paterson Central Electric R. R., at a foreclosure sale, on June 15.

TRENTON, N. J.—It is announced that most of the right of way has been obtained, and that construction work will soon be begun on the Trenton, Lakewood & Seashore Electric Ry., from Trenton to Point Pleasant, via Newton, Allentown, Cassville, Lakewood and Burrsville. John L. Murphy, Trenton, and Gerrit S. Glen, New York, are interested; C. C. Vermuele, Engr., 203 Broadway, New York.

BETHLEHEM, PA.—The Bethlehem & Bath St. Ry. Co. was incorporated June 20, with $36,000 capital stock, to construct a line between Bethlehem and Bath. Joseph J. McKee, Pres.; F. W. Leinbach and Geo. H. Wolle, of Bethlehem; A. S. Keck, Allentown, Pa., are incorporators.

OXFORD, PA.—G. W. Taft, Kennett Square, Pa., Pres. of Oxford & Kennett Electric Ry. Co., incorporated June 12, informs us that this line is projected as an extension of the West Chester, Kennett & Wilmington Ry. No steps have been taken beyond procuring a charter.

SPRINGFIELD, PA.—The Springfield St. Ry. Co. was incorporated June 6, with $75,000 capital stock, to build in Delaware county. Simon Bennett, Pres., Springfield; P. D. Curtis, Marple, Pa., and F. H. MacDonald, Philadelphia, are incorporators.

YARDLEY, PA.—The Yardley, Morrisville & Trenton St. Ry. Co. was incorporated June 7, with $36,000 capital stock, to build in Yardley. W. F. Sadler, Pres., and M. F. Thompson, Carlisle; W. F. Sadler, Jr., Trenton, N. J.

WASHINGTON, D. C.—The district commissioners have authorized the Washington Heights Traction R. R. Co. to commence work on its line. It is not intended to complete the work until an entrance into this city is secured for by the construction of a proposed extension of the Capital Traction Co.'s line.

ANNAPOLIS, MD.—The Potomac & Severn Electric Ry. Co. has been incorporated, with $1,000,000 capital stock, to build from the eastern line of the District of Columbia to this city, on the Severn River. J. O. Ellinger, G. ... ins, D. M. Ludington, Baltimore, Incorporators.

HAGERSTOWN, MD.—The Hagerstown & Frederick Ry. Co. was incorporated June 2, with $200,000 capital stock, by W. M. Douglass, Millerstown, Pa.; Albert Nitzell, Hagerstown, and others.

NORFOLK, VA.—The Washington Traction & Electric Co. was incorporated June 5, with $12,000,000 proposed capital stock. Samuel B. Lawrence, Pres.; Geo. H. Spencer, Treas., New York.

SPARTANBURG, S. C.—F. D. McEowen, Charleston, S. C., and F. B. Jennings, New York, are reported to have received a franchise to construct a street railway and an electric light and power plant in this city. About six miles of line will be built at once. F. H. Knox, Pittsburg, Pa.

OWENSBORO, KY.—We are informed that the right of way has been obtained for the proposed Owensboro & Calhoun Electric Ry., to be about 22 miles in length. About 10,000 acres of coal lands have been leased for petroleum, natural gas and clays are also found along the route. For further information address John D. Fredd, Owensboro. J. H. Hickman, Pres.

ALLIANCE, O.—The Alliance, Selina & Salem Electric Ry. Co., of Selina, was incorporated June 7, with $100,000 capital stock, to build from Alliance to Sebring. H. W. Klein, J. C. Whitla and H. C. Estep are incorporators.

FINDLAY, O.—The Findlay St. Ry. Co. has been granted a franchise to build an extension to Mortimer.

SPRINGFIELD, O.—The Springfield, Columbus & Zanesville Electric Ry. Co. has been incorporated, with $100,000 capital stock, by J. A. Menling, A. T. Seymour, W. H. Jones and others, of Columbus, O.

INDIANAPOLIS, IND.—We are informed that plans have been perfected for the proposed Indianapolis & Martinsville Electric St. Ry. to run from this city to Martinsville, 30 miles, and that bids for construction and equipment, jointly or separately, will now be received. The company will also offer $500,000 in bonds for sale. The proposed line will pass through nine towns, and the adjacent farms are prosperous. There is also an abundant water power along the route. Address J. C. Tarkington, Gen. Mgr., 218 North Meridian St., Indianapolis.

LOWELL, MICH.—J. H. McLane & Co., Coldwater, Mich., are reported to have been awarded the contract, June 9, for constructing the proposed Grand Rapids, Belding & Saginaw Electric Ry. from Lowell to Belding, at about $150,000. Work is to be completed by Sept. 15.

PEORIA, ILL.—John J. McDonald has been awarded the contract for erecting the car and round house of the Peoria & Pekin Terminal Co., to cost about $20,000. The power house is now under construction.

ROCKFORD, ILL.—The Rock River Electric Ry. is now under construction, and a large force of men is at work rebuilding the dam at Oregon, where the power station will be located. The line will be 28 miles in length, extending from Rockford to Oregon, Ill., and will connect with the Chicago Great Western Ry. at Byron. Next year it will be extended to Dixon, and eventually to Sterling and some point on the Mississippi River. The track will be laid with 60-lb. T-rails, and the line will carry passengers and freight traffic, serving as a feeder to the Chicago Great Western Ry. E. M. Hopkins, Pres.

MANKATO, MINN.—The Mankato Electric St. Ry., Light & Power Co. was incorporated, June 10, with $500,000 capital stock. L. S. Lamm, C. J. McBeth and O. W. Schmidt are incorporators.

MINNEAPOLIS, MINN.—The Minneapolis & St. Paul Suburban Ry. Co. was incorporated, June 9, with $1,300,000 capital stock, to build an extension to Stillwater. Thomas Lowry, C. G. Goodrich and M. B. Koon.

BAKERSFIELD, CAL.—H. F. Williams & Co. have applied to this city for a franchise to build from this city to Kern. Power will be furnished by the Development Co. in Kern River Canyon, 14 miles from Bakersfield.

RIO DE JANIERO, BRAZIL.—Bids are asked by the Brazilian government until Aug. 12 for 30 miles of street railway track.

ELECTRIC LIGHT AND POWER.

BOSTON, MASS.—Bids are asked until June 28 for installing a plant in the postoffice and subtreasury building. H. A. Taylor, Asst. Secy., Washington.

EAST HADDAM, CONN.—The East Haddam Electric Co., it is reported, proposes to build a stone dam 55 ft. high, a power house, etc., at East Hampton; estimated cost, about $75,000.

CAMILLUS, N. Y.—W. G. Sisson, of the Camillus Electric Light Co., writes us that it is assured that the franchise will be secured in about two months. Bids will be wanted for a complete plant.

FREEPORT, (L. I.), N. Y.—This place voted on June 10 to issue $10,000 in bonds for enlarging the plant.

OGDENSBURG, N. Y.—Amasa Thornton, 35 Nassau St., and F. S. Williamson, Consult. Engr., 257 Broadway, both of New York, are interested in a proposed water-power plant on the Waddington River, at Waddington. We are informed that the plant will at first generate 3,000 HP. and will cost $350,000. The project is not financed as yet. Mr. Williamson has made a report to Sir Douglas Fox, 28 Victoria St., S. W., London, which he has endorsed. Further examinations will now be made. It is intended to develop 13,000 HP. by means of turbines. Contracts have already been made to sell several thousand electric horse-power. Mr. Williamson will be chief engineer, with Sir Douglas Fox and Francis Fox, London, England, as consulting engineers.

UTICA, N. Y.—M. J. Brayton, Secy. Utica Electric Light Co., writes us that preliminary plans are being prepared for the development of the water power at Trenton Falls; the construction of a power house, electrical equipment and necessary transmission line for the Trenton Falls Electric Light & Power Co. The hydraulic development has not as yet been given in charge of the engineers, but probably will be at an early date. The company hopes to be able to let the contracts in July. A meeting of the stockholders will be held June 26 to approve the agreement made by the directors for the consolidation of the Utica Electric Light Co., the Utica Electrical Mfg. & Supply Co., and the Trenton Falls Electric Light & Power Co.

CARBONDALE, PA.—A new company is reported by local papers as being organized to build a plant.

GIRARD, PA.—Bids are asked until July 7 for furnishing the materials and for constructing a plant and waterworks, as stated in our advertising columns. J. F. Witmer, Engr., Ellicott Square, Buffalo, N. Y.; C. C. Sherman, Burgess.

LUZERNE, PA.—Councilman J. T. Killeen writes us that the town is about to build a plant.

DOVER, DEL.—Councilman Alden R. Benson writes us that bids will be wanted in June or July for constructing a plant to cost $10,000. The plant will have a capacity for 40 arc and 500 incandescent lights.

BALTIMORE, MD.—The council is considering an ordinance appointing A. Leo Knott, Prof. Jacob H. Hollender, of the Johns Hopkins University, and Chas. E. Phelps, Jr., Ch. Engr. Subway Comn., a commission to investigate the question of a municipal plant.

NORFOLK, VA.—The property of the Virginia Electric Co., which has been purchased for about $700,000 by Middendorf, Oliver & Co., Baltimore, and John L. Williams & Sons, Richmond, Va., has been transferred in New York. The syndicate is the same that controls the Norfolk St. Ry. Co. and the Norfolk & Ocean View Ry. Co. R. Lancaster Williams is president of both. The consolidated company may be named the Norfolk & Ocean View Ry. Co. The electric plant will be enlarged and improved and will furnish power to the street railways.

HARPER'S FERRY, W. VA.—The Harper's Ferry Light & Power Co.'s plant has been sold to John A. Livers, of Gettysburg, Pa., and H. W. Riley, of Hanover, Pa., who will enlarge the plant.

THOMAS, W. VA.—O. M. Nearsherd, Mayor, writes us that nothing will be done toward constructing a plant until the water-works are completed, which will be Sept. 1.

GASTONIA, N. C.—An election will be held Aug. 1 to vote on the question of issuing bonds for a plant.

LOUISBURG, N. C.—Geo. S. Baker writes us that the election to vote on the question of building a plant and wafer-works has been postponed.

WAYNESVILLE, N. C.—H. W. Ferguson, Mayor, writes us that bids will be wanted about July 15 for the purchase of the bonds for the proposed water power plant.

GREENVILLE, S. C.—The American Pipe Mfg. Co., 1319 Filbert St., Philadelphia, is reported as preparing to improve the plant here, at a cost of about $25,000.

HUNTSVILLE, ALA.—The Huntsville Ry., Light & Power Co., it is stated, will build a plant.

BASTROP, LA.—This place has voted to issue bonds for a plant and water-works.

LAKE PROVIDENCE, LA.—Arthur Hider, U. S. Asst. Engr., Lake Providence, has been engaged to prepare plans for a plant and water-works to cost $17,500.

COOKEVILLE, TENN.—A company is being organized to build a plant, according to reports.

BAINBRIDGE, O.—E. O. Lease, Mayor, writes us that bonds for the plant, to cost $7,000, will probably be sold about Aug. 1.

BATAVIA, O.—John Hillen, Mayor, writes us that the committee, which is investigating the question of building a plant will report July 3. A report states that $50,000 in bonds will be issued for a plant and water-works.

BELLAIRE, O.—Bids will be asked at once for lighting the streets.

VERSAILLES, O.—This place is making arrangements for the construction of its proposed plant and water-works to cost about $25,000. J. W. Reser, Cy. Clk.

SEYMOUR, IND.—The question of either building a city plant or of granting a franchise will soon be voted upon, according to reports.

GRAND RAPIDS, MICH.—The Frank B. Rae Engineering Co. and W. S. Monroe, Chicago, Ill., have submitted a report for a power plant on the Grand River, at this place, to cost about $330,000. W. H. Rowe, Julius Berkey, C. G. A. Voigt and J. W. Spooner are interested.

CHICAGO, ILL.—The Diamond Match Co. has submitted a proposition to the sanitary board to utilize the water power of the drainage channel. The work is estimated to cost about $1,000,000.

DECATUR, ILL.—A new company is said to have been organized to build a plant. John Allen is interested.

LA SALLE, ILL.—The Enterprise Light, Heat & Power Co. has been granted a franchise. A steam-heating and electric light plant to cost $100,000 will be built at once, according to reports.

LOUISVILLE, ILL.—It is stated that the council has voted to contract with Reed & Surrels, Chicago, to put in a plant and water-works for this city, to cost $10,500.

MINIER, ILL.—The question of building a plant is being considered by the trustees.

DUBUQUE, IA.—The Dubuque Light & Traction Co.'s plant has been sold to the General Electric Co., Schenectady, N. Y., for $50,000. It is said that a number of improvements will be made.

MECHANICSVILLE, IA.—We are informed that a 10-year lighting contract has been made with Davidson & Helmer, of this place. The plant is to be in operation by Sept. 1. L. L. Kennedy, Mayor.

SEYMOUR, IA.—Bids are asked by R. F. Greer, Town Clk., for furnishing the material and for constructing a plant, as advertised in Engineering News. Population, 2,200. Fred. W. Salmon, Engr., Burlington, Ia.

MANKATO, MINN.—The Mankato Electric Ry., Lighting & Power Co. has purchased some property on which a new plant will be built. W. I. Gray & Co., Engrs., Sykes Bldg., Minneapolis.

SANDSTONE, MINN.—A company has been organized to build a plant, it having already received the contract for lighting the town.

KANSAS CITY, MO.—The Mutual Electric Light & Power Co. has been organized by W. H. Weiss, Coate's House, Kansas City, and others, to build a plant, to cost about $500,000.

PINE BLUFF, ARK.—Plans are reported as being prepared for a plant.

BELLEVILLE, TEX.—J. G. Wessendorf is reported as interested in the proposed plant.

LOVELAND, COLO.—Ray Smith, Longmont, Colo., has been granted a franchise, it to be in operation Oct. 1.

VICTOR, COLO.—The Hayden Electric Co., of Goldfield, Colo., has applied for a 25-year franchise.

NAPA, CAL.—The Clear Lake Electric Power Co. proposes to build a plant on Cache Creek to transmit power to St. Helena, Napa, Vallejo, Benicia, Santa Rosa, etc., estimated cost $650,000. Richard Wylie, Pres., Napa; E. H. Winship, Gen. Mgr., Napa; A. M. Hunt, 310 Pine St., and Wynn Meredith, Engrs, both of San Francisco.

SANTA ANA, CAL.—The trustees have contracted with Belmont, Perry & Co., Los Angeles, to install a plant to cost about $60,000. Power is to be brought from Santa Ana Canyon, 100 miles distant, in the San Bernardino Mountains.

LEHI, UTAH.—Christian Garff, of Ogden, Utah, has been granted a franchise. A plant to cost about $30,000 will be built at the mouth of American Fork Canyon.

HAMILTON, ONT.—The board of works is said to have accepted a proposition submitted by the Cataract Power Co. to furnish arc lights for 10 years from Sept. 1, 1900.

PRESCOTT, ONT.—Bids are asked until June 30 for an engine for a plant; capacity, about 125 HP. Galt & Speakman, Engrs., Canada Life Bldg., Toronto, Ont.

ST. HYACINTHE, QUE.—Press reports state as follows: A syndicate of Toronto capitalists has purchased the franchises and property of the Hyacinthe Power & Electric Light Co. It is proposed to rebuild the power house, remodel the electric system and make extensive improvements, for which considerable machinery and supplies will be required.

THURSO, QUE.—The Stadacona Electric & Water Co. is to make improvements, for which the town has appropriated $18,000, according to reports.

NELSON, B. C.—The council is reported as making arrangements for extending the plant, to cost $15,000, for which bonds were voted May 30.

BRIDGES.

SPRINGFIELD, VT.—M. L. Lawrence, Town Clk., informs us that plans for the construction of a bridge have been submitted, but that no action will be taken soon.

AGAWAM, MASS.—Bids are asked by the selectmen until June 22 for the construction of a two 120-ft. span riveted steel bridge; estimated cost, $16,000. H. E. Bodentha, Chn. Selectmen; H. L. Norton, Des. Engr.

GLENS FALLS, N. Y.—The contract for the construction of two iron bridges over Halfway Brook was awarded June 16 to Monty, Higley & Co., of Sandy Hill, at $1,099.

OWEGO, N. Y.—Reports state that the contract for constructing three county bridges has been let to the Owego Bridge Co., at $2,800.

ROCK RIFT, N. Y.—It is stated that a new steel bridge is to be erected at a cost of $8,000.

SYRACUSE, N. Y.—It is reported that the contract for the erection of a 40-ft. span bridge over Ley Creek in the town of Salina has been awarded to H. Ryan, at $2,000.

CAPE MAY, N. J.—Bids are asked by the committee of the board of freeholders until June 29 for the construction of a bridge and abutments at Schellenger's Landing, as stated in our advertising columns. F. R. Long Co., Engrs., 320 Broadway, New York.

COATESVILLE, PA.—Bids are asked by the Street Committee until July 1 for the construction of a stone and brick bridge over Gibbon's Run on Fourth Ave. Joseph Graham, Chn.

KANE, PA.—Bids are asked by the Borough of Kane for the construction of an iron or steel bridge across the Pittsburg & Easton R. R. tracks. J. E. Mullin, Secy.

NEWPORT, KY.—E. E. Ball, County Engr., California, Ky., informs us that the following bids were received June 5 for the construction of the iron spans over Ten-Mile and Phillips Creeks:

	Ten-Mile Creek. 24-ft. span.	Phillips Creek. 36-ft. span.
Pittsburg Bridge Co., Pittsburg	$432	$684
La Fayette Bridge Co., La Fayette	450	780
Cincinnati Bridge Co., Cincinnat	440	598
Brackett Bridge Co., Cincinnati	429	579
Joliet Bridge Co., Joliet, Ill.	985	....
Variety Iron Works, Cleveland	*18	....
Massillon Bridge Co., Massillon	447	586

*A lin. ft.

There will be under construction in the next 90 days three wooden bridges and two iron bridges.

LIMA, O.—Bids are asked until July 6 for the construction of two steel bridges over Ottawa River, as stated in our advertising columns. C. E. Lynch, Cy. Clk.

FOWLER, IND.—Bids are asked by the county commissioners of Benton county until July 5 for the construction of five steel county bridges. J. A. Blaisdel, Surv.

GREENFIELD, IND.—Bids are asked by the county commissioners until June 24 for the construction of three county bridges, and until July 10 for the construction of a bridge over Sugar Creek near Milners Corner on the Township line between Green and Brown townships, Hancock county, Ind. John Manche, Comr.

INDIANAPOLIS, IND.—Bids are asked by the board of park commissioners until June 23 for the construction of two footway suspension bridges in Riverside Park, according to reports. Wm E. English, Chn.—Reports state that at the meeting June 12 the board of works requested the city controller to recommend that there be appropriated the sum of $150,000 for the construction of new bridges over Fall Creek and White River.

KENTLAND, IND.—Bids are asked by the county commissioners until July 3 for the construction of the superstructure of ten bridges, according to reports. Edward E. Parsons, Chn.

INDEPENDENCE, WIS.—It is stated that the village board will ask for bids for the construction of a steel bridge across Elk Creek.

DAKOTAH, IA.—We are informed that the Clinton Bridge Co., Clinton, Ia., bid $2,736 for a 170-ft. span steel bridge to be erected at this place.

STAPLES, MINN.—Bids are asked until June 24 for the construction of a bridge over Swan Creek, according to reports. Ed. Ryan, Town Clk.

COOPERSTOWN, N. DAK.—Bids are asked until July 1 for the construction of two bridges, according to reports. Mason Knapp, Town Clk.

DICKINSON, N. DAK.—Bids are asked until July 8 for the construction of a steel bridge, according to reports. John Pressbeck, County Audr.

FARGO, N. DAK.—Bids are asked until July 10 for the construction of a steel bridge across the Maple River, according to reports. O. J. Olson, County Audr.

GLENDIVE, MONT.—Reports state that the question of rebuilding the bridge, at an estimated cost of $40,000, is being considered.

MILES CITY, MONT.—Bids are asked by A. H. Swerdfiger, Clerk of Custer county, until June 26, for the construction of two wagon bridges, one over Powder River and the other over Mispath Creek, according to reports.

PORT ORCHARD, WASH.—Bids are asked until July 3 for the construction of a bridge in road district No. 11, on Watts Road. C. W. Clausen, Audr. Kitsap County.

COQUILLE, ORE.—Bids are asked by the County Court of Coos county until July 8 for plans, specifications, etc., and for building a bridge according to such plans across the middle fork of the Coquille River. L. Harlocker, County Judge.

LOS GATOS, CAL.—Bids are asked until July 3 for the construction of a bridge over Los Gatos Creek, at Campbell's Ave.

SAN JOSE, CAL.—Bids are asked by the City Clerk until July 3 for the construction of a bridge over San Antonio Creek.

WATSONVILLE, CAL.—Bids are asked by the county supervisors until July 3 for the construction of a bridge over Corralitos Creek. H. H. Miller, Clk. of the Bd.

WILLOWS, CAL.—Reports state that the Southern Pacific will during this month erect a steel bridge across Story Creek, at Orland; also one across Walker Creek, between this place and Germantown.

ALBUQUERQUE, N. MEX.—Reports state that the contract for building the bridge across the Rio Grande River has been awarded to the Pueblo Bridge Co., of Pueblo, Colo., at $13,000.

BUILDINGS.

BOSTON, MASS.—Bids are asked until June 24 for the installation of a hot-water heating apparatus for the ropewalk, etc., at the navy yard, Boston. A. S. Kenny, Paymaster-General, U. S. N., Washington, D. C.

NEWPORT, R. I.—Bids are asked by the bureau of navigation, Washington, D. C., until July 12, for constructing a barracks at the U. S. naval training station on Coaster's Harbor Island, Newport.

NEW HAVEN, CONN.—Plans are reported to have been accepted for the new law school building for Yale University, to be erected on Elm St., at a cost of $100,000. Cady, Berg & See, 31 East 17th St., New York.

BROOKLYN, N. Y.—We are informed that the following bids were received by the bureau of yards and docks June 17 for erecting an administration building for steam engineering purposes at the navy yard, Brooklyn: K. A. Murphy, Brooklyn, $34,900; Ryan & McFarran, New York, $38,500; W. G. Triest, New York, $39,826; Mapes-Reeve Construction Co., New York, $41,402; P. J. Carlin & Co., Brooklyn, $41,529; Grace & Hyde Co., New York, $41,850; Jno. Thatcher, Brooklyn, $43,460.——The following bids were received by the board of education, at 585 Broadway, New York, June 19, for building an addition to public school 64, Brooklyn: Geo. Hilderbrand, Brooklyn, $166,989; K. A. Murphy, 96 Linwood St., $180,000; Mapes-Reeve Construction Co., 150 Nassau St., New York, $183,920; John Thatcher, 54 Park Ave., $189,681; W. & T. Lamb, Fulton St., N. Y., $192,367.——The following bids were received June 19 for heating and ventilating public school 84, Brooklyn; all bidders of New York: E. Butzler, 178 Centre St., $22,597; New York Steam Fitting Co., 137 Elm St., $22,900; Phillip Dorf Co., $23,050; Blake & Williams, 362 West Broadway, $23,145; Evans, Almiral & Co., 44 Dey St., $23,362; Baldwin Engineering Co., 106 Beekman St., $23,819; Wells & Newton Co., 231 Eldridge St., $23,840.

GROTON, N. Y.—Bids are asked until June 30 for constructing a firemen's hall and municipal building. L. J. Townley, Village Clk.; M. L. Van Kirk, Arch., Waterloo.

JAMESVILLE, N. Y.—Bids are asked until June 26 for constructing and equipping the proposed penitentiary at this place for Onondaga county; deposit, $25,000. C. E. Shinaman, Clk. of Supervisors, Memorial Bldg., Syracuse; M. D. Makepeace, Arch., Syracuse.

LOWVILLE, N. Y.—The bids received for erecting the proposed town hall for this place exceeded the $20,000 appropriation by $6,000. No awards were made; the plans will probably be revised. Leon H. Lempert, Arch., Rochester, N. Y.

NEW YORK, N. Y.—Bids are asked by the bureau of yards and docks, Washington, D. C., until July 1 for the removal of old roof and construction of new roof for building No. 12, New York navy yard.——Plans have been filed by C. F. Deneger, 124 East 84th St., for four 5-story brick flat buildings on 98th St., near Madison Ave., to cost $104,000. Edward Wenz, Arch., 1491 3d Ave.; by Manhattan Brass Co., 485 1st Ave., for a 6-story brick factory building on 28th St., near 1st Ave., to cost $75,000. Buchman & Deisler, Archs.; by Adolph Openhym, 42 Greene St., for two 5-story brick and stone dwellings on Riverside Drive, near 108th St., to cost $80,000. Robt D. Kohn, Arch., 96 5th Ave.; by Geo. M. Jansen, 160 East 14th St., for a 3-story brick theatre building on 42d St., near 7th Ave., to cost $200,000. John E. Kerby, Arch., 722 Tremont Ave.; by M. McCormack, 50 West 127th St., for a 7-story brick flat and store building at 116th St. and St. Nicholas Ave., to cost $200,000. Neville & Bagge, Archs., 217 West 125th St.; by J. McSweeney, 241 West 103d St., for a 7-story brick flat and store building at 125th St. and Broadway, to cost $125,000. Brower & Ganle, Archs., 2787 Broadway; by Owen Costello, 181 East 84th St., for an 8-story brick store and loft building, at 56 East 11th St., to cost $58,000. R. Moeller, Arch., 959 East 165th St.; by Strauss & Rothschild, 109 East 81st St., for a 5-story and a 6-story brick flat and store building at 116th St. and Lenox Ave., to cost $70,000. G. F. Pelham, Arch., 503 5th Ave.; by M. E. Stevens, 54 Wall St., for a 6-story brick and stone flat building at 86th St. and Amsterdam Ave., to cost $100,000. C. C. Manning, Arch., 38 East 86th st.; by Potter & Teichman, 527 5th Ave., for a 10-story brick office and store building at Broad and Front Sts., to cost $140,000. G. F. Pelham, Arch.

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until June 26, for erecting additions to several school buildings; also until June 29 for heating and ventilating apparatus, electric lighting, elevators, plumbing, etc., etc., for new hall of the board of education and for heating plant for public school 44, Manhattan, etc.

YONKERS, N. Y.—Bids are asked by the board of education until July 1 for erecting a school building at McLean and Park Hill Aves.

NEWARK, N. J.—Bids are asked until June 27 for constructing the masonry and frame work of shelters Nos. 1, 2 and 3, and public lavatory building, in Branch Brook Park, Newark, as stated in our advertising columns. A. Church, Secy. of Essex County Park Commission, 800 Broad St., Newark; Carrere & Hastings, Archs., 28 East 41st St., New York.

ORANGE, N. J.—It is reported that a free public library building will be erected in this city as a memorial to the late Dr. J. M. Stickler.

CARLISLE, PA.—Bids are asked until June 26 for furnishing and delivering about 2,000 bushels of sand, 650 bushels of lime, 150,000 brick, structural iron, etc., for the Carlisle Indian Industrial School. R. H. Pratt, Supt.

NORRISTOWN, PA.—Bids are asked until June 27 for constructing two new brick ward buildings at the State Hospital for Insane for the Southeastern District of Pennsylvania, at this place. Thomas P. Lonsdale, Consulting Arch., 4th and Walnut Sts., Philadelphia.

WASHINGTON, D. C.—Bids are asked until July 10 for excavating and boring on site of new building for government printing office. Lieut. John S. Sewell, U. S. Engrs., 735 North Capitol St.——The following bids were received June 10 for erecting a new 8-room school building on 15th St., between Rosedale and Gales Ave.: W. E. Speir, $37,550; Richardson & Burgess, $37,214; Gleason & Humphrey, $32,300, with $800 extra for cement and $600 extra for floors with steel girders in the school rooms. As the bids exceed the appropriation, no contracts will probably be let.——The following bids were received by the supervising architect, Washington, D. C., June 15, for repairs to the heating and power plants of the U. S. Treasury (Winder) Bldg. and the U. S. Marine Hospital Service (Butler) Bldg., in this city: Philadelphia (Pa.) Steam Heating Co., $23,993, Oct. 15; Zellers & Co., 1406 P St., N.W., Washington, $32,200, 90 days; E. Keeler Co., Williamsport, Pa., $25,500, 3 mos.

WASHINGTON, D. C.—Bids are asked by the district commissioners until June 26 for constructing an 8-room school building at South Carolina Ave. and 2d St., S. E., and an 8-room school building on 15th St., between Gales and Rosedale Sts., N. E.; also for hot air or hot blast steam heating apparatus, with mechanical ventilating appliances, for the same.

FORTRESS MONROE, VA.—The following bids are reported to have been received June 10 for constructing a hospital steward's quarters at Fort Monroe: C. P. Townsley, Q. M., U. S. A.: D. B. Burham, Newport News, Va.,

June 28. Reservoir, West Point, Neb. ..... June 15
June 28. Garbage plant, Lancaster, Pa. ..... June 15
June 28. Brick paving, Norwich, N. Y. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 28. Masonry arches, Cleveland, O. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 28. Main sewer, Princeton, Ill. ..... June 22
June 28. Electric plant, Boston, Mass. ..... June 22
June 28. Pike roads, Vernon, Ind. ..... June 22
June 29. Random stone, Key West, Fla. ..... June 1
Advertised, Eng. News, June 1 to 22.
June 29. Dredging, Tampa, Fla. ..... June 1
Advertised, Eng. News, June 1 to 22.
June 29. Wall—Channel, Albany, N. Y. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 29. Heating, electric lighting, etc., New York. June 22
June 29. Filter basin, etc., Phoenixville, Pa. ..... June 22
Advertised, Eng. News, June 22 and 29.
June 29. Bridge, Cape May, N. J. ..... June 22
Advertised, Engineering News, June 22.
June 30. Electric ry (25 miles), Shanghai, China. Mar. 2
Advertised, Eng. News, Nov. 17 to Dec. 8.
June 30. Barges (6), New Orleans, La. ..... June 8
Advertised, Eng. News, June 8 to 22.
June 30. Sewers, Marshall, Mich. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 30. Dredging, Cleveland, O. ..... June 15
Advertised, Eng. News, June 15 and 22.
June 30. Water-Works, Chapel Hill, N. C. ..... June 15
Advertised, Engineering News, June 15.
June 30. Water and electric plants, Belgrade, Minn. June 15
June 30. Water and sewer systems, Walker, Minn. ..... June 15
June 30. Engine for electric plant, Prescott, Ont. ..... June 22
June 30. Water-works, Michigan City, Ind. ..... June 22
Advertised, Eng. News, June 22 and 29.
June 30. Brick sewer, Troy, N. Y. ..... June 22
June 30. Municipal building, Groton, N. Y. ..... June 22
July 1. Revetments, Duluth, Minn. ..... June 1
Advertised, Eng. News, June 1 to 22.
July 1. Sewers, Larchmont, N. Y. ..... June 15
Advertised, Engineering News, June 15.
July 1. Paving, Wooster, O. ..... June 15
July 1. Viaduct, Fort Worth, Tex. ..... June 15
July 1. Bridge, Wood River, Neb. ..... June 15
July 1. Bridge, Abbott, Neb. ..... June 15
July 1. Bridges (2), Montesano, Wash. ..... June 15
July 1. Roof for building, New York, N. Y. ..... June 22
July 1. School building, Yonkers, N. Y. ..... June 22
July 1. Paint shop, etc., Port Royal, S. C. ..... June 22
July 1. Public building, Chicago, Ill. ..... June 22
July 1. Bridge, Coatesville, Pa. ..... June 22
July 1. Bridges (2), Cooperstown, N. Dak. ..... June 22
July 1. Laying water mains, Livermore Falls, Me. June 22
July 3. Plans for kursaal, Harrogate, England. ..... May 18
July 3. Water softening plant, Winnipeg, Man. ..... May 25
July 3. Levee work, Memphis, Tenn. ..... June 8
Advertised, Eng. News, June 8 to 29.
July 3. Bridge, Hornellsville, N. Y. ..... June 15
Advertised, Eng. News, June 1 and 8.
July 3. Water-works castings, Cincinnati, O. ..... June 15
July 3. Turnpike road, Maynardville, Tenn. ..... June 15
July 3. Block paving, Toledo, O. ..... June 15
July 3. School building, Coshocton, O. ..... June 22
July 3. Bridge, Port Orchard, Wash. ..... June 22
July 3. Paving, Binghamton, N. Y. ..... June 22
July 3. Bridge, San Jose, Cal. ..... June 22
July 3. Bridges (10), Kentland, Ind. ..... June 22
July 3. Tubular boilers (3), Columbus, O. ..... June 22
July 3. Pumping engine, Grand Forks, N. Dak. ..... June 22
July 3. Paving and sewers, Rome, N. Y. ..... June 22
Advertised, Eng. News, June 22 and 29.
July 4. Paving and sewers, Marion, Ind. ..... June 22
July 5. Supplies, Memphis, Tenn. ..... June 8
Advertised, Eng. News, June 8 to 29.
July 5. Drainage system, New Orleans, La. ..... May 4
Advertised, Eng. News, May 4 to June 29.
July 5. School building, Barbersville, Ind. ..... June 15
July 5. Sewers, Cohoes, N. Y. ..... June 22
Advertised, Engineering News, June 22.
July 5. U. S. building work, Minneapolis, Minn. ..... June 22
July 5. Steel bridges (5), Fowler, Ind. ..... June 22
July 5. Brick paving, Chillicothe, O. ..... June 22
Advertised, Engineering News, June 22.
No date. Electric plant, Seymour, Ia. ..... June 22
Advertised, Engineering News, June 22.
" . Electric railway (30 mls), Indianapolis, Ind. June 22
" . Artesian well, Fort Gaines, Ga. ..... June 22
" . Steel bridge, Kane, Pa. ..... June 22

RAILWAYS.

ARIZONA & UTAH.—S. B. McConnico, Vice-Pres. and Gen. Mgr., Kingman, Ariz., informs us that 18 miles of this line have been built, and that the balance is under contract to Kenefick & Lusk,, 33 Wall St., New York. The route is from Kingman to White Hills, via McConnico and Chloride, 50 miles. F. L. Underwood, Pres., 31 Nassau St., New York; H. M. McCartney, Ch. Engr., Kingman.

CHATTAHOOCHEE VALLEY.—A. C. Smith, West Point, Ga., informs us that bids are now being received for constructing an extension between Lanett and Riverdale, via Langdale, 35 miles. The right of way has been obtained and the capital secured. L. Lanier, Pres., West Point.

CHESAPEAKE & OHIO.—Contracts have been let, according to reports, for double tracking the section of this line between Clifton Forge, Va., and Huntington, W. Va. The D. Shanahan Sons Co., of Louisville, Ky., are about to commence the erection of a steel viaduct and a station at Richmond, Va., to cost $3,000,000. Other extensive improvements are being planned. H. Pierce, Engr. Maintenance-of-Way, Huntington, W. Va.

DENVER, KINGFISHER & GULF.—Incorporated in Oklahoma June 8 with $1,000,000 capital stock, to construct a line from Denver east to Kiowa, Kingfisher and Sabine Pass, Tex. F. L. Winkler, W. F. Bart and J. A. Overstreet, of Kingfisher, Okla., are directors.

EDDYSTONE & DELAWARE RIVER.—Incorporated in Pennsylvania June 12 with $50,000 capital stock, to construct a steam railway in Delaware county. Lincoln Godfrey, Pres., Radnor, Pa.; Wm. P. Simpson, Overbrook, Pa.; and John W. Fraley, New York, are incorporatofs.

GREENWICH & JOHNSONVILLE.—This company has decided to extend its line to Middle Falls, N. Y., a distance of about 2 miles. Henry Gray, Greenwich, N. Y.

KANSAS, OKLAHOMA CENTRAL & SOUTHWESTERN.—We are informed that work is being pushed on this branch of the Atchison, Topeka & Santa Fe Ry. between Caney, Kan., and Bartlesville, Ind. Ter. Steel has been laid from Caney south to Cotton Creek, and it is expected to reach Bartlesville in July, provided that high water does not interfere with the bridge work. B. J. Dalton, Ch. Engr., Caney, Kan.

MANHATTAN & JERSEY CITY.—Incorporated in New York June 16 with $10,000 capital stock, to construct one mile of railway through a tunnel under Hudson River from New York to Jersey City or Hoboken, N. J. Ernest C. Moore, 130 Pearl St.; H. W. Brinckerhoff, and Oliver Hull, New York, are incorporators.

MISSOURI PACIFIC.—A company has been organized at Perry, Okla., according to reports, to build an extension of the Roper and Peru branch of this line in Kansas, south through Pawhuska, Ind. Ter., to Perry.

PEORIA & ST. LOUIS.—Dwight L. Wing, Springfield, Ill., the promoter of this railway, is taking active steps toward constructing the proposed line from Peoria to Springfield, Ill., 55 miles. E. F. Harper, Engr., East St. Louis, Ill.

RAQUETTE LAKE.—About 600 men are reported to be at work on this new line of railway from Clearwater, N. Y., on the Mohawk & Malone branch of the New York Central & Hudson River R. R., to Brown's Tract Inlet on Raquette Lake. The road is graded to Eagle Bay, on Fourth Lake, about one-half the distance, and it is expected to complete the work by Aug. 1. J. W. & E. Whalen, Whitehall, N. Y., are the contractors.

SERVIA.—Edward Calthorp and D. Markus, London, England, are reported to have received a concession from the Servian government to build and operate six railways. Work must begin within two years, and be completed within nine years.

TEXAS.—The Clark & Boice Lumber Co., Jefferson, Tex., contemplates the construction of a railway from Jefferson to Linden. Address C. H. Nelson, Linden.

TEXAS & PACIFIC.—This company is about to build an extension of its line from Port Allen to New Rhodes, La., about 25 miles. Part of the contracts have been let. B. S. Wathen, Ch. Engr., Dallas, Tex.

TEXAS CENTRAL.—C. Hamilton, Vice-Pres. and Gen. Mgr., Waco, Tex., informs us that the location has been completed, the right of way obtained and capital secured for building the extension from Albany to Stamford, Tex., 40 miles. The contract for grading has been let to Ricker, Lee & Co., Galveston, Tex.; for masonry, to R. L. Newman and J. M. Ackerman; for ties to William Cameron, and for steel bridges to the Edge Moor Bridge Works, Wilmington, Del. H. K. McHarg, Pres., New York.

TIFTON, THOMASVILLE & GULF.—The Union Lumber Co. is constructing this proposed line from Tifton, Ga., towards Thomasville, and expects to complete 56 miles of line this year. F. J. Ansley, Secy., Tifton.

TRENTON, LAWRENCEVILLE & PRINCETON.—We are informed that the second section of this new line of steam railway, or between Lawrenceville and Stony Brook, N. J., a distance of 4.55 miles, was let on June 20 to M. Hurley, Trenton, N. J. The route is from Trenton to Princeton, via Ewing, Lawrenceville and Rosedale. The total length now let and under construction is 9½ miles. J. L. Branson, Pres., Langhorne, Pa.; E. G. Weir, Ch. Engr., Trenton, N. J.

WADLEY & MOUNT VERNON.—This company has announced its intention to apply for authority to extend its line from Wadley, northeast to Augusta, Ga., 55 miles, and from Rixville, southwest to Valdosta, Ga., 140 miles. T. J. James, Pres., Wadley, Ga.

YANKTON, NORFOLK & SOUTHERN.—J. S. Meckling, Chicago, Ill., is said to be making arrangements for financiering a construction company to build this proposed line from Yankton, S. Dak, to Omaha, Neb., 180 miles; estimated cost, $2,700,000. About 45 of the 75 miles between Yankton and Norfolk, Neb., have been graded and bridged, and is owned by W. W. Graham, Norwalk, O.

STREET AND ELECTRIC RAILWAYS.

PORTLAND, ME.—The Portland R. R. Co. has filed an application with the railroad commissioners for permission to extend its Cape Elizabeth branch to Saco, a distance of 14 miles. E. A. Newman, Secy. and Mgr.

LEXINGTON, MASS.—The Lexington & Boston St. Ry. Co. has been chartered, with $170,000 capital stock, to build from Arlington Heights through Lexington and Bedford to Billerica, 17 miles. C. W. Smith, Treas.

RANDOLPH, MASS.—The selectmen granted a franchise June 14 to the Stoughton & Randolph St. Ry. Co.

MONTVILLE, CONN.—Peck, Williams & Co., Norwich, Conn., are reported to have been awarded the contract for erecting the new car houses and power house for the Montville St. Ry. Co., at Thamesville.

SOUTHINGTON, CONN.—Work began in this town, June 14, on the grading for the proposed extension of the Central Ry. & Electric Co.'s line from Plainville to Southington. F. G. Platt, Treas., New Britain, Conn. The contract is held by F. T. Ley & Co., Springfield, Mass.

NIAGARA FALLS, N. Y.—The council granted a franchise to the Niagara Falls St. Ry. Co., June 12, to construct a crosstown line from the upper power district to the property of the Highlands Land Co. in the northeastern part of the city. J. L. Simmons, Vice-Pres., Gluck Bldg., Niagara Falls.

OSWEGO, N. Y.—The Oswego Traction Co. has been organized, with $300,000 capital stock, by S. M. Coon, D. B. Page, Oswego; C. C. Cook, New York, and others.

SCHENECTADY, N. Y.—The Schenectady Ry. Co. has been granted a franchise to extend its line through Nott Terrace, Union St. and Union Ave. Theo. Stebbins, Mgr.

HOBOKEN, N. J.—The New Jersey Electric Ry. is reported to have been sold at Secaucus, N. J., to Chanler Riker, Newark, N. J., for $1,500,000. The system comprised the Jersey City, Hoboken & Rutherford Electric Ry., the Paterson, Passaic & Rutherford Electric Ry., and the Paterson Central Electric R. R., operating 60 miles of line.

MORRISTOWN, N. J.—The Morris County Traction Co. has been incorporated, with $250,000 capital stock, to build a trolley line from Caldwell to Morristown, and ultimately to Lake Hopatcong. John H. Copstick, Montville, N. J.; Robert D. Foote, Morristown, and George W. Stickle, Rockaway, N. J., are incorporators.

NEWARK, N. J.—The White Line Traction Co. was incorporated June 9, with $4,000,000 capital stock, with $25,000 paid in, to construct and operate lines in New Jersey. Fred. W. Egner, Edward A. Pruden and George Barker, 763 Broad St., Newark, are incorporators.

PATERSON, N. J.—Albert A. Wilcox, Paterson, bought the property of the Paterson Central Electric R. R., at a foreclosure sale, on June 15.

TRENTON, N. J.—It is announced that most of the right of way has been obtained, and that construction work will soon be begun on the Trenton, Lakewood & Seashore Electric Ry., from Trenton to Point Pleasant, via Newton, Allentown, Cassville, Lakewood and Burrsville. John L. Murphy, Trenton, and Gerrit S. Glen, New York, are interested; C. C. Vermuele, Engr., 203 Broadway, New York.

BETHLEHEM, PA.—The Bethlehem & Bath St. Ry. Co. was incorporated June 20, with $36,000 capital stock, to construct a line between Bethlehem and Bath. Joseph J. McKee, Pres.; F. W. Leinbach and Geo. H. Wolle, of Bethlehem; A. S. Keck, Allentown, Pa., are incorporators.

OXFORD, PA.—G. W. Taft, Kennett Square, Pa., Pres. of Oxford & Kennett Electric Ry. Co., incorporated June 12, informs us that this line is projected as an extension of the West Chester, Kennett & Wilmington Ry. No steps have been taken beyond procuring a charter.

SPRINGFIELD, PA.—The Springfield St. Ry. Co. was incorporated June 6, with $75,000 capital stock, to build in Delaware county. Simon Bennett, Pres., Springfield; P. D. Curtis, Marple, Pa., and F. H. MacDonald, Philadelphia, are incorporators.

YARDLEY, PA.—The Yardley, Morrisville & Trenton St. Ry. Co. was incorporated June 7, with $36,000 capital stock, to build in Yardley. W. F. Sadler, Pres., and M. F. Thompson, Carlisle; W. F. Sadler, Jr., Trenton, N. J.

WASHINGTON, D. C.—The district commissioners have authorized the Washington Heights Traction R. R. Co. to commence work on its line. It is not intended to complete the work until an entrance into this city is provided for by the construction of a proposed extension of the Capital Traction Co.'s line.

ANNAPOLIS, MD.—The Potomac & Severn Electric Ry. Co. has been incorporated, with $1,000,000 capital stock, to build from the eastern line of the District of Columbia to this city, on the Severn River. J. O. Gringer, G. ..., D. M. Ludington, Baltimore, Incorporators.

HAGERSTOWN, MD.—The Hagerstown & Frederick Ry. Co. was incorporated June 2, with $200,000 capital stock, by W. M. Douglass, Millerstown, Pa., Albert Nitzell, Hagerstown, and others.

NORFOLK, VA.—The Washington Traction & Electric Co. was incorporated June 5, with $12,000,000 proposed capital stock. Samuel B. Lawrence, Pres., Geo. H. Spencer, Treas., New York.

SPARTANBURG, S. C.—F. D. McEowen, Charleston, S. C., and F. B. Jennings, New York, are reported to have received a franchise to construct a street railway and an electric light and power plant in this city. About six miles of line will be built at once. F. H. Knox, Engr., Pittsburg, Pa.

OWENSBORO, KY.—We are informed that the right of way has been obtained for the proposed Owensboro & Calhoun Electric Ry., to be about 22 miles in length. About 10,000 acres of coal lands have been leased, petroleum, natural gas and clays are also found along the route. For further information address John D. Frizzell, Owensboro. J. H. Hickman, Pres.

ALLIANCE, O.—The Alliance, Selina & Salem Electric Ry. Co., of Selina, was incorporated June 7, with $100,000 capital stock, to build from Alliance to Selina. H. W. Klein, J. C. Whitla and H. C. Estep are incorporators.

FINDLAY, O.—The Findlay St. Ry. Co. has been granted a franchise to build an extension to Mortimer.

SPRINGFIELD, O.—The Springfield, Columbus & Zanesville Electric Ry. Co. has been incorporated, with $10,000 capital stock, by J. A. Medling, A. T. Seymour, W. H. Jones and others, of Columbus, O.

INDIANAPOLIS, IND.—We are informed that plans have been perfected for the proposed Indianapolis & Martinsville Electric St. Ry. to run from this city to Martinsville, 30 miles, and that bids for construction and equipment, jointly or separately, will now be received. The company will also offer $300,000 in bonds for sale. The proposed line will pass through nine towns, and the adjacent farms are prosperous. There is also an abundant water power along the route. Address J. C. Tarkington, Gen. Mgr., 218 North Meridian St., Indianapolis.

LOWELL, MICH.—J. H. McLane & Co., Coldwater, Mich., are reported to have been awarded the contract, June 9, for constructing the proposed Grand Rapids, Belding & Saginaw Electric Ry. from Lowell to Belding, at about $150,000. Work is to be completed by Sept. 1.

PEORIA, ILL.—John J. McDonald has been awarded the contract for erecting the car and round house of the Peoria & Pekin Terminal Co., to cost about $25,000. The power house is now under construction.

ROCKFORD, ILL.—The Rock River Electric Ry. is now under construction, and a large force of men is at work rebuilding the dam at Oregon, where the power station will be located. The line will be 28 miles in length, extending from Rockford to Oregon, Ill., and will connect with the Chicago Great Western Ry. at Byron. Next year it will be extended to Dixon, and eventually to Sterling and some point on the Mississippi River. The track will be laid with 60-lb. T-rails, and the line will carry passengers and freight traffic, serving as a feeder to the Chicago Great Western Ry. E. M. Hopkins, Pres.

MANKATO, MINN.—The Mankato Electric St. Ry., Light & Power Co. was incorporated, June 10, with $500,000 capital stock. L. S. Lamm, C. J. McBeth and O. W. Schmidt are incorporators.

MINNEAPOLIS, MINN.—The Minneapolis & St. Paul Suburban Ry. Co. was incorporated, June 9, with $1,300,000 capital stock, to build an extension to Stillwater. Thomas Lowry, C. G. Goodrich and M. B. Koon.

BAKERSFIELD, CAL.—H. F. Williams & Co. have applied to this city for a franchise to build from this city to Kern. Power will be furnished by the Development Co. in Kern River Canyon, 14 miles from Bakersfield.

RIO DE JANIERO, BRAZIL.—Bids are asked by the Brazilian government until Aug. 12 for 30 miles of street railway track.

ELECTRIC LIGHT AND POWER.

BOSTON, MASS.—Bids are asked until June 28 for installing a plant in the postoffice and subtreasury building. H. A. Taylor, Asst. Secy., Washington.

EAST HADDAM, CONN.—The East Haddam Electric Co., it is reported, proposes to build a stone dam 55 ft. high, a power house, etc., at East Hampton; estimated cost, about $75,000.

CAMILLUS, N. Y.—W. G. Sisson, of the Camillus Electric Light Co., writes us that it is assured that the franchise will be secured in about two months. Bids will be wanted for a complete plant.

FREEPORT, (L. I.), N. Y.—This place voted on June 10 to issue $10,000 in bonds for enlarging the plant.

OGDENSBURG, N. Y.—Amasa Thornton, 35 Nassau St., and F. S. Williamson, Consult. Engr., 257 Broadway, both of New York, are interested in a proposed water-power plant on the Waddington River, at Waddington. We are informed that the plant will at first generate 3,000 HP. and will cost $350,000. The project is not financed as yet. Mr. Williamson has made a report to Sir Douglas Fox, 28 Victoria St., S. W., London, which he has endorsed. Further examinations will now be made. It is intended to develop 15,000 HP. by means of turbines. Contracts have already been made to sell several thousand electric horse-power. Mr. Williamson will be chief engineer, with Sir Douglas Fox and Francis Fox, London, England, as consulting engineers.

UTICA, N. Y.—M. J. Brayton, Secy. Utica Electric Light Co., writes us that preliminary plans are being prepared for the development of the water power at Trenton Falls; the construction of a power house, electrical equipment and necessary transmission line for the Trenton Falls Electric Light & Power Co. The hydraulic development has not as yet been given in charge of the engineers, but probably will be at an early date. The company hopes to be able to let the contracts in July. A meeting of the stockholders will be held June 26 to approve the agreement made by the directors for the consolidation of the Utica Electric Light Co., the Utica Electrical Mfg. & Supply Co., and the Trenton Falls Electric Light & Power Co.

CARBONDALE, PA.—A new company is reported by local papers as being organized to build a plant.

GIRARD, PA.—Bids are asked until July 7 for furnishing the materials and for constructing a plant and waterworks, as stated in our advertising columns. J. F. Witmer, Engr., Ellicott Square, Buffalo, N. Y.; C. C. Sherman, Burgess.

LUZERNE, PA.—Councilman J. T. Killeen writes us that the town is about to build a plant.

DOVER, DEL.—Councilman Alden R. Benson writes us that bids will be wanted in June or July for constructing a plant to cost $10,000. The plant will have a capacity for 40 arc and 500 incandescent lights.

BALTIMORE, MD.—The council is considering an ordinance appointing A. Leo Knott, Prof. Jacob H. Hollender, of the Johns Hopkins University, and Chas. E. Phelps, Jr., Ch. Engr. Subway Comn., a commission to investigate the question of a municipal plant.

NORFOLK, VA.—The property of the Virginia Electric Co., which has been purchased for about $700,000 by Middendorf, Oliver & Co., Baltimore, and John L. Williams & Sons, Richmond, Va., has been transferred in New York. The syndicate is the same that controls the Norfolk St. Ry. Co. and the Norfolk & Ocean View Ry. Co. R. Lancaster Williams is president of both. The consolidated company may be named the Norfolk & Ocean View Ry. Co. The electric plant will be enlarged and improved and will furnish power to the street railways.

HARPER'S FERRY, W. VA.—The Harper's Ferry Light & Power Co.'s plant has been sold to John A. Livers, of Gettysburg, Pa., and H. W. Riley, of Hanover, Pa., who will enlarge the plant.

THOMAS, W. VA.—O. M. Nearsherd, Mayor, writes us that nothing will be done toward constructing a plant until the water-works are completed, which will be Sept. 1.

GASTONIA, N. C.—An election will be held Aug. 1 to vote on the question of issuing bonds for a plant.

LOUISBURG, N. C.—Geo. S. Baker writes us that the election to vote on the question of building a plant and water-works has been postponed.

WAYNESVILLE, N. C.—H. W. Ferguson, Mayor, writes us that bids will be wanted about July 15 for the purchase of the bonds for the proposed water power plant.

GREENVILLE, S. C.—The American Pipe Mfg. Co., 1319 Filbert St., Philadelphia, is reported as preparing to improve the plant here, at a cost of about $25,000.

HUNTSVILLE, ALA.—The Huntsville Ry., Light & Power Co., it is stated, will build a plant.

BASTROP, LA.—This place has voted to issue bonds for a plant and water-works.

LAKE PROVIDENCE, LA.—Arthur Hider, U. S. Asst. Engr., Lake Providence, has been engaged to prepare plans for a plant and water-works to cost $17,500.

COOKEVILLE, TENN.—A company is being organized to build a plant, according to reports.

BAINBRIDGE, O.—E. O. Lease, Mayor, writes us that bonds for the plant, to cost $7,000, will probably be sold about Aug. 1.

BATAVIA, O.—John Hillen, Mayor, writes us that the committee, which is investigating the question of building a plant will report July 3. A report states that $50,000 in bonds will be issued for a plant and water-works.

BELLAIRE, O.—Bids will be asked at once for lighting the streets.

VERSAILLES, O.—This place is making arrangements for the construction of its proposed plant and water-works to cost about $25,000. J. W. Reser, Cy. Clk.

SEYMOUR, IND.—The question of either building a city plant or of granting a franchise will soon be voted upon, according to reports.

GRAND RAPIDS, MICH.—The Frank B. Rae Engineering Co. and W. S. Monroe, Chicago, Ill., have submitted a report for a power plant on the Grand River, at this place, to cost about $330,000. W. H. Rowe, Julius Berkey, C. G. A. Voigt and J. W. Spooner are interested.

CHICAGO, ILL.—The Diamond Match Co. has submitted a proposition to the sanitary board to utilize the water power of the drainage channel. The work is estimated to cost about $1,000,000.

DECATUR, ILL.—A new company is said to have been organized to build a plant. John Allen is interested.

LA SALLE, ILL.—The Enterprise Light, Heat & Power Co. has been granted a franchise. A steam-heating and electric light plant to cost $100,000 will be built at once, according to reports.

LOUISVILLE, ILL.—It is stated that the council has voted to contract with Reed & Surrels, Chicago, to put in a plant and water-works for this city, to cost $10,500.

MINIER, ILL.—The question of building a plant is being considered by the trustees.

DUBUQUE, IA.—The Dubuque Light & Traction Co.'s plant has been sold to the General Electric Co., Schenectady, N. Y., for $50,000. It is said that a number of improvements will be made.

MECHANICSVILLE, IA.—We are informed that a 10-year lighting contract has been made with Davidson & Helmer, of this place. The plant is to be in operation by Sept. 1. L. L. Kennedy, Mayor.

SEYMOUR, IA.—Bids are asked by R. F. Greer, Town Clk., for furnishing the material and for constructing a plant, as advertised in Engineering News. Population, 2,200. Fred. W. Salmon, Engr., Burlington, Ia.

MANKATO, MINN.—The Mankato Electric Ry., Lighting & Power Co. has purchased some property on which a new plant will be built. W. I. Gray & Co., Engrs., Sykes Bldg., Minneapolis.

SANDSTONE, MINN.—A company has been organized to build a plant, it having already received the contract for lighting the town.

KANSAS CITY, MO.—The Mutual Electric Light & Power Co. has been organized by W. H. Weiss, Coate's House, Kansas City, and others, to build a plant, to cost about $500,000.

PINE BLUFF, ARK.—Plans are reported as being prepared for a plant.

BELLEVILLE, TEX.—J. G. Wessendorf is reported as interested in the proposed plant.

LOVELAND, COLO.—Ray Smith, Longmont, Colo., has been granted a franchise, it to be in operation Oct. 1.

VICTOR, COLO.—The Hayden Electric Co., of Goldfield, Colo., has applied for a 25-year franchise.

NAPA, CAL.—The Clear Lake Electric Power Co. proposes to build a plant on Cache Creek to transmit power to St. Helena, Napa, Vallejo, Benicia, Santa Rosa, etc., estimated cost $650,000. Richard Wylie, Pres., Napa; E. H. Winship, Gen. Mgr., Napa; A. M. Hunt, 310 Pine St., and Wynn Meredith, Engrs, both of San Francisco.

SANTA ANA, CAL.—The trustees have contracted with Belmont, Perry & Co., Los Angeles, to install a plant to cost about $60,000. Power is to be brought from Santa Ana Canyon, 100 miles distant, in the San Bernardino Mountains.

LEHI, UTAH.—Christian Garff, of Ogden, Utah, has been granted a franchise. A plant to cost about $30,000 will be built at the mouth of American Fork Canyon.

HAMILTON, ONT.—The board of works is said to have accepted a proposition submitted by the Cataract Power Co. to furnish arc lights for 10 years from Sept. 1, 1900.

PRESCOTT, ONT.—Bids are asked until June 30 for an engine for a plant; capacity, about 125 HP. Galt & Speakman, Engrs., Canada Life Bldg., Toronto, Ont.

ST. HYACINTHE, QUE.—Press reports state as follows: A syndicate of Toronto capitalists has purchased the franchises and property of the Hyacinthe Power & Electric Light Co. It is proposed to rebuild the power house, remodel the electric system and make extensive improvements, for which considerable machinery and supplies will be required.

THURSO, QUE.—The Stadacona Electric & Water Co. is to make improvements, for which the town has appropriated $18,000, according to reports.

NELSON, B. C.—The council is reported as making arrangements for extending the plant, to cost $15,000, for which bonds were voted May 30.

BRIDGES.

SPRINGFIELD, VT.—M. L. Lawrence, Town Clk., informs us that plans for the construction of a bridge have been submitted, but that no action will be taken soon.

AGAWAM, MASS.—Bids are asked by the selectmen until June 22 for the construction of a two 120-ft. span riveted steel bridge; estimated cost, $16,000. H. E. Bodentha, Chn. Selectmen; H. L. Norton, Des. Engr.

GLENS FALLS, N. Y.—The contract for the construction of two iron bridges over Halfway Brook was awarded June 16 to Monty, Higley & Co., of Sandy Hill, at $1,090.

OWEGO, N. Y.—Reports state that the contract for constructing three county bridges has been let to the Owego Bridge Co., at $2,800.

ROCK RIFT, N. Y.—It is stated that a new steel bridge is to be erected at a cost of $8,000.

SYRACUSE, N. Y.—It is reported that the contract for the erection of a 40-ft. span bridge over Ley Creek in the town of Salina has been awarded to H. Ryan, at $2,000.

CAPE MAY, N. J.—Bids are asked by the committee of the board of freeholders until June 29 for the construction of a bridge and abutments at Schellenger's Landing, as stated in our advertising columns. F. R. Long Co., Engrs., 320 Broadway, New York.

COATESVILLE, PA.—Bids are asked by the Street Committee until July 1 for the construction of a stone and brick bridge over Gibbon's Run on Fourth Ave. Joseph Graham, Chn.

KANE, PA.—Bids are asked by the Borough of Kane for the construction of an iron or steel bridge across the Pittsburg & Easton R. R. tracks. J. E. Mullin, Secy.

NEWPORT, KY.—E. E. Ball, County Engr., California, Ky., informs us that the following bids were received June 5 for the construction of the iron spans over Ten-Mile and Phillips Creeks:

	Ten-Mile Creek. 24-ft. span.	Phillips Creek. 36-ft. span.
Pittsburg Bridge Co., Pittsburg	$432	$684
La Fayette Bridge Co., La Fayette	459	589
Cincinnati Bridge Co., Cincinnat	440	598
Brackett Bridge Co., Cincinnati	429	579
Joliet Bridge Co., Joliet, Ill.	985	....
Variety Iron Works, Cleveland	*18	....
Massillon Bridge Co., Massillon	447	586

*A lin. ft.

There will be under construction in the next 90 days three wooden bridges and two iron bridges.

LIMA, O.—Bids are asked until July 6 for the construction of two steel bridges over Ottawa River, as stated in our advertising columns. C. E. Lynch, Cy. Clk.

FOWLER, IND.—Bids are asked by the county commissioners of Benton county until July 5 for the construction of five steel county bridges. J. A. Blaisdel, Surv.

GREENFIELD, IND.—Bids are asked by the county commissioners until June 24 for the construction of three county bridges, and until July 10 for the construction of a bridge over Sugar Creek near Milners Corner on the Township line between Green and Brown townships, Hancock county, Ind. John Manche, Comr.

INDIANAPOLIS, IND.—Bids are asked by the board of park commissioners until June 23 for the construction of two footway suspension bridges in Riverside Park, according to reports. Wm E. English, Chn.—Reports state that at the meeting June 12 the board of works requested the city controller to recommend that there be appropriated the sum of $150,000 for the construction of new bridges over Fall Creek and White River.

KENTLAND, IND.—Bids are asked by the county commissioners until July 3 for the construction of the superstructure of ten bridges, according to reports. Edward E. Parsons, Chn.

INDEPENDENCE, WIS.—It is stated that the village board will ask for bids for the construction of a steel bridge across Elk Creek.

DAKOTAH, IA.—We are informed that the Clinton Bridge Co., Clinton, Ia., bid $2,736 for a 170-ft. span steel bridge to be erected at this place.

STAPLES, MINN.—Bids are asked until June 24 for the construction of a bridge over Swan Creek, according to reports. Ed. Ryan, Town Clk.

COOPERSTOWN, N. DAK.—Bids are asked until July 1 for the construction of two bridges, according to reports. Mason Knapp, Town Clk.

DICKINSON, N. DAK.—Bids are asked until July 8 for the construction of a steel bridge, according to reports. John Pressbeck, County Audr.

FARGO, N. DAK.—Bids are asked until July 10 for the construction of a steel bridge across the Maple River, according to reports. O. J. Olson, County Audr.

GLENDIVE, MONT.—Reports state that the question of rebuilding the bridge, at an estimated cost of $40,000, is being considered.

MILES CITY, MONT.—Bids are asked by A. H. Swerdfiger, Clerk of Custer county, until June 26, for the construction of two wagon bridges, one over Powder River and the other over Mispath Creek, according to reports.

PORT ORCHARD, WASH.—Bids are asked until July 3 for the construction of a bridge in road district No. 11, on Watts Road. C. W. Clausen, Audr. Kitsap County.

COQUILLE, ORE.—Bids are asked by the County Court of Coos county until July 8 for plans, specifications, etc., and for building a bridge according to such plans across the middle fork of the Coquille River. L. Harlocker, County Judge.

LOS GATOS, CAL.—Bids are asked until July 3 for the construction of a bridge over Los Gatos Creek, at Campbell's Ave.

SAN JOSE, CAL.—Bids are asked by the City Clerk until July 3 for the construction of a bridge over San Antonio Creek.

WATSONVILLE, CAL.—Bids are asked by the county supervisors until July 3 for the construction of a bridge over Corralitos Creek. H. H. Miller, Clk. of the Bd.

WILLOWS, CAL.—Reports state that the Southern Pacific will during this month erect a steel bridge across Story Creek, at Orland; also one across Walker Creek, between this place and Germantown.

ALBUQUERQUE, N. MEX.—Reports state that the contract for building the bridge across the Rio Grande River has been awarded to the Pueblo Bridge Co., of Pueblo, Colo., at $13,000.

BUILDINGS.

BOSTON, MASS.—Bids are asked until June 24 for the installation of a hot-water heating apparatus for the rope-walk, etc., at the navy yard, Boston. A. S. Kenny, Paymaster-General, U. S. N., Washington, D. C.

NEWPORT, R. I.—Bids are asked by the bureau of navigation, Washington, D. C., until July 12, for constructing a barracks at the U. S. naval training station on Coaster's Harbor Island, Newport.

NEW HAVEN, CONN.—Plans are reported to have been accepted for the new law school building for Yale University, to be erected on Elm St., at a cost of $100,000. Cady, Berg & See, 31 East 17th St., New York.

BROOKLYN, N. Y.—We are informed that the following bids were received by the bureau of yards and docks June 17 for erecting an administration building for steam engineering purposes at the navy yard, Brooklyn: K. A. Murphy, Brooklyn, $34,900; Ryan & McFarran, New York, $38,500; W. G. Triest, New York, $39,826; Mapes-Reeve Construction Co., New York, $41,402; P. J. Carlin & Co., Brooklyn, $41,529; Grace & Hyde Co., New York, $41,850; Jno. Thatcher, Brooklyn, $43,460.——The following bids were received by the board of education, at 585 Broadway, New York, June 19, for building an addition to public school 64, Brooklyn: Geo. Hilderbrand, Brooklyn, $166,989; K. A. Murphy, 96 Linwood St., $187,000; Mapes-Reeve Construction Co., 150 Nassau St., New York, $183,920; John Thatcher, 54 Park Ave., $189,661; W. & T. Lamb, Fulton St., N. Y., $192,367.——The following bids were received June 19 for heating and ventilating public school 84, Brooklyn; all bidders of New York: E. Butzler, 178 Centre St., $22,597; New York Steam Fitting Co., 137 Elm St., $22,900; Phillip Dorf Co., $23,050; Blake & Williams, 362 West Broadway, $23,145; Evans, Almiral & Co., 44 Dey St., $23,362; Baldwin Engineering Co., 106 Beekman St., $23,819; Wells & Newton Co., 231 Eldridge St., $23,840.

GROTON, N. Y.—Bids are asked until June 30 for constructing a firemen's hall and municipal building. L. J. Townley, Village Clk.; M. L. Van Kirk, Arch., Waterloo.

JAMESVILLE, N. Y.—Bids are asked until June 26 for constructing and equipping the proposed penitentiary at this place for Onondaga county; deposit, $25,000. C. E. Shinaman, Clk. of Supervisors, Memorial Bldg., Syracuse; M. D. Makepeace, Arch., Syracuse.

LOWVILLE, N. Y.—The bids received for erecting the proposed town hall for this place exceeded the $20,000 appropriation by $6,000. No awards were made; the plans will probably be revised. Leon H. Lempert, Arch., Rochester, N. Y.

NEW YORK, N. Y.—Bids are asked by the bureau of yards and docks, Washington, D. C., until July 1 for the removal of old roof and construction of new roof for building No. 12, New York navy yard.——Plans have been filed by C. F. Deneger, 124 East 84th St., for four 5-story brick flat buildings on 98th St., near Madison Ave., to cost $104,000. Edward Wenz, Arch., 1491 3d Ave.; by Manhattan Brass Co., 485 1st Ave., for a 6-story brick factory building on 28th St., near 1st Ave., to cost $75,000. Buchman & Deisler, Archs.; by Adolph Onenhym, 42 Greene St., for two 5-story brick and stone dwellings on Riverside Drive, near 108th St., to cost $80,000. Robt D. Kohn, Arch., 96 5th Ave.; by Geo. M. Jansen, 160 East 14th St., for a 3-story brick theatre building on 42d St., near 7th Ave., to cost $200,000. John E. Kerby, Arch., 722 Tremont Ave.; by M. McCormack, 50 West 127th St., for a 7-story brick flat and store building at 116th St. and St. Nicholas Ave., to cost $200,000. Neville & Bagge, Archs., 217 West 125th St.; by J. McSweeney, 241 West 103d St., for a 7-story brick flat and store building at 125th St. and Broadway, to cost $125,000. Brower & Ganle, Archs., 2787 Broadway; by Owen Costello, 181 East 84th St., for an 8-story brick store and loft building, at 56 East 11th St., to cost $58,000. R. Moeller, Arch., 959 East 165th St.; by Strauss & Rothschild, 109 East 81st St., for a 5-story and a 6-story brick flat and store building at 116th St. and Lenox Ave., to cost $70,000. G. F. Pelham, Arch., 503 5th Ave.; by M. E. Stevens, 54 Wall St., for a 6-story brick and store flat building at 86th St. and Amsterdam Ave., to cost $100,000. C. C. Manning, Arch., 58 East 86th st.; by Potter & Teichman, 527 5th Ave., for a 10-story brick office and store building at Broad and Front Sts., to cost $140,000. G. F. Pelham, Arch.

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until June 26, for erecting additions to several school buildings; also until June 29 for heating and ventilating apparatus, electric lighting, elevators, plumbing, etc., etc., for new hall of the board of education and for heating plant for public school 44, Manhattan, etc.

YONKERS, N. Y.—Bids are asked by the board of education until July 1 for erecting a school building at McLean and Park Hill Aves.

NEWARK, N. J.—Bids are asked until June 27 for constructing the masonry and frame work of shelters Nos. 1, 2 and 3, and public lavatory building in Branch Brook Park, Newark, as stated in our advertising columns. A. Church, Secy. of Essex County Park Commission, 800 Broad St., Newark; Carrere & Hastings, Archs., 28 East 41st St., New York.

ORANGE, N. J.—It is reported that a free public library building will be erected in this city as a memorial to the late Dr. J. M. Stickler.

CARLISLE, PA.—Bids are asked until June 26 for furnishing and delivering about 2,000 bushels of sand, 650 bushels of lime, 150,000 brick, structural iron, etc., for the Carlisle Indian Industrial School. R. H. Pratt, Supt.

NORRISTOWN, PA.—Bids are asked until June 27 for constructing two new brick ward buildings at the State Hospital for Insane for the Southeastern District of Pennsylvania, at this place. Thomas P. Longdale, Consulting Arch., 4th and Walnut Sts., Philadelphia.

WASHINGTON, D. C.—Bids are asked until July 10 for excavating and boring an site of new building for government printing office. Lieut. John S. Sewell, U. S. Engrs., 735 North Capitol St.——The following bids were received June 10 for erecting a new 8-room school building on 15th St., between Rosedale and Gales Ave.: W. F. Snelr, $37,550; Richardson & Burgess, $37,214; Gleason & Humphrey, $32,300, with $800 extra for cement and $600 extra for floors with steel girders in the school rooms. As the bids exceed the appropriation, no contracts will probably be let.——The following bids were received by the supervising architect, Washington, D. C., June 15, for repairs to the heating and power plants of the U. S. Treasury (Winder) Bldg. and the U. S. Marine Hospital Service (Butler) Bldg. in this city: Philadelphia (Pa.) Steam Heating Co., $23,993, Oct. 15; Zellers & Co., 1406 P St., N.W., Washington, $32,200, 90 days; E. Keeler Co., Williamsport, Pa., $28,500, 3 mos.

WASHINGTON, D. C.—Bids are asked by the district commissioners until June 26 for constructing an 8-room school building at South Carolina Ave. and 24 St., S. E., and an 8-room school building on 15th St., between Gales and Rosedale Sts., N. E.; also for hot air or hot blast steam heating apparatus, with mechanical ventilating appliances, for the same.

FORTRESS MONROE, VA.—The following bids are reported to have been received June 10 for constructing a hospital steward's quarters at Fort Monroe: C. P. Townsley, Q. M., U. S. A.: D. B. Burham, Newport News, Va.,

$2,590; A. E. Murray, Norfolk, Va., $3,075; P. A. Fuller, Phoebus, Va., $3,080; Holtzclaw Bros., Hampton, Va., $2,783; A. P. Gladden, Newport News, Va., $2,693; R. E. Bristow, Newport News, Va., $2,575.

HUNTINGTON, W. VA.—The Gresham & Boyd Co., Charleston, W. Va., is reported to have been awarded the contract for erecting a building for the Home for Incurables at this place, at $24,870. Bids are asked until July 1 for heating the same. John K. Thompson, Chn. of Bd.

PARKERSBURG, W. VA.—Caldwell & Drake, Columbus, Ind., are reported to have been awarded the contract for erecting a new court house here for Wood county, at $89,946. Work is to begin at once. L. W. Thomas, Arch., Canton, O.

GREENSBORO, N. C.—A fire at this place June 17 destroyed the Benbow Hotel building; estimated loss,$75,000. B. G. Fischer, Proprietor.

RALEIGH, N. C.—At the election in this city on June 12 it was voted to issue $50,000 in school bonds.

PORT ROYAL, S. C.—Bids are asked until July 1 for constructing a paint shop and storage for combustibles, 120×60×15 ft., of brick and steel at the naval station, Port Royal. M. T. Endicott, Ch. of Bureau of Yards and Docks, Washington, D. C.

ATLANTA, GA.—The Atlanta Realty Co. is reported to have decided to erect a new 15-story building at Broad and Marietta Sts., to cost about $200,000. Harry M. Atkinson, Atlanta, and F. J. Coolidge, Jr., Boston, Mass., are interested.

ERWIN, TENN.—Bids are asked until July 1 for constructing a foreman's dwelling at the U. S. fish commission near Erwin. Geo. M. Bowers, Comr., Washington.

AKRON, O.—It is reported that St. Bernard's Church will erect a new building, 75×168 ft., to cost about $60,000. J. B. Brown, Pastor.

CLEVELAND, O.—Bids are asked until June 24 for constructing a life-saving station in this city upon a wharf to be built for that purpose for the U. S. life-saving service. H. L. Piper, Acting Gen. Supt., Washington, D.C.

COSHOCTON, O.—Bids are asked until July 3 for erecting a 4-room school building in this city. J. W. Cassingham, Clk. Bd.; H. C. Lindsay, Arch., Zanesville, O.

LEBANON, IND.—Bids are asked until July 28 for erecting a new court house for Boone county, to cost about $200,000. Plans and specifications have been adopted.

CENTERVILLE, MICH.—Bids are asked until June 27 for erecting a court house at this place for St. Joseph county. Address J. H. Whitmer, Centerville; Sidney J. Osgood, Arch., Grand Rapids, Mich.

DETROIT, MICH.—Bids are asked until June 28 for constructing about 30 iron election booths. D. W. H. Moreland, Pres. Bd. Pub. Wks.

MOUNT PLEASANT, MICH.—Bids are asked by the state board of education until June 23 for erecting an addition to the present normal school building. Address J. E. Hammond; Spies & Rohns, Archs., Chamber of Commerce Bldg., Detroit, Mich.

SAGINAW, MICH.—Bids are asked by the board of public works until June 23 for constructing a chapel and receiving vault, Forest Lawn Cemetery. Alfred Davies, Clk.

CHICAGO, ILL.—Bids are asked by the supervising architect, Washington, D. C., until July 1, for constructing (except heating apparatus) an extension to the temporary post office building in this city.—D. H. Burnham & Co. are said to be preparing plans for the new hospital building to be built for the Wesley Hospital Association at Dearborn and 25th Sts., to cost about $200,000.

WEYAUWEGA, WIS.—Bids are asked by A. L. Hutchinson until June 24 for constructing a hotel building at this place to cost about $12,000. A. D. Werner, Arch., Fond du Lac, Wis.

DES MOINES, IA.—We are informed that bids were opened June 19 for erecting a 2-story office building, 66× 132 ft., with iron work heavy enough for three additional stories. Hallett & Rawson, Archs.

VINTON, IA.—A special election for Benton county will be held July 18 to vote upon the proposition of erecting a new court house to cost about $75,000.

MINNEAPOLIS, MINN.—Bids are asked by the supervising architect, Washington, D. C., until July 5 for certain interior changes and the erection and completion (except heating apparatus and electric fixtures) of an extension of the U. S. building in this city.—Plans are reported to have been prepared for a new office building, to be erected at 2d and 4th Sts., to cost $115,000. Cass Gilbert, Arch.—An 8-story business building, to be known as the Republican Block, will soon be erected on 1st Ave., at a cost of about $200,000. U. L. Appleford, Business Mgr.; H. W. Jones, Arch.—P. W. De Lancy, Minneapolis, is reported to have received the contract for erecting the new horticulture and physics building at the state agricultural farm, at $24,998. The contract for 8,500 ft. of radiation was let to Hugh Kelly, at $3,485.

FULTON, MO.—Bids are asked until June 29 for erecting a 3-story brick wing to Asylum No. 1, Fulton. P. S. Adams, Pres. Bd. of Mgrs.

PACIFIC, MO.—Bids are asked until June 24 for a low pressure steam heating apparatus for the public school building. C. C. Close, Secy. of Bd.

COLLEGE STATION, TEX.—Bids are asked until June 29 for erecting a 55-room brick dormitory building; bond, $10,000. L. L. Foster, Pres. of Agricultural and Mechanical College of Texas.

HELENA, MONT.—The following bids were received by the supervising architect, Washington, D. C., June 20, for the construction (except heating apparatus, elevator and electric wire conduits) of the U. S. building at Helena; time, 23 months: Montana Building Co., Helena, $339,154; Amberg Granite Co., Chicago, $349,269; Butler-Ryan Co., St. Paul, $347,000.

MILES CITY, MONT.—Bids are asked until June 24 for installing a steam heating plant in the girls' building, 48× 100 ft., of the state reform school, requiring a 75-HP. boiler. John E. de Carle, Secy. Bd. of Trustees.

SILETZ, ORE.—Bids are asked by the office of Indian affairs, Washington, D. C., until July 20 for constructing a dining-room and kitchen at the Siletz agency boarding school. T. Jay Buford, Indian Agt.

BERKELEY, WASH.—Wm. M. Fletcher, San Francisco, has been awarded the contract for building the new Wilmerding school of industrial arts, at $19,994.

WINNIPEG, MANITOBA.—Plans are being prepared for a natural science building for the University of Manitoba, to cost about $40,000. George Browne, Arch.

FENELON FALLS, ONT.—Bids are asked until June 26 for erecting a town hall in this village. W. L. Robson, Village Treas.

WATER-WORKS.

LEWISTON, ME.—E. H. Gowing, 95 Milk St., Boston, Mass., has submitted a report on extending the conduit from Lake Auburn. Mr. Gowing recommended the construction of a 36-in. line for 3,000 ft. and 24-in. line for the balance. The work will cost from $99,000 to $125,000, according to the route, three being named. Our correspondent informs us that the citizens, at a meeting on June 14, endorsed the motion to extend the line. J. A. Jones, Cy. Engr.; W. D. Pennell, Chn. Bd.

LIVERMORE FALLS, ME.—Bids are asked until July 1 for furnishing the materials and for excavating and laying about six miles of pipe, setting hydrants, gates, etc. The pipe, etc., has already been purchased from M. J. Drummond & Co., 192 Broadway, New York. J. A. Jones, Engr., Lewiston, Me.. Address J. H. Maxwell, of the Livermore Falls Water Co.

NORTHFIELD, VT.—Prof. C. W. Emerson, Boston, has submitted a proposition to put in new works.

CHESHIRE, MASS.—The Cheshire Water Co. proposes to secure an additional water supply.

LENOX, MASS.—Local papers state that the Lenox Water Co. proposes to build a new pumping station and otherwise improve the works.

WILLIMANTIC, CONN.—Bids are asked by the committee until July 24 for furnishing pumping machinery for the water-works, as stated in our advertising columns.

LANSINGBURGH, N. Y.—Bids are asked by the board of water commissioners until July 6 for furnishing about 23,000 ft. of water pipe, etc., as stated in our advertising columns. C. E. Hicks, Engr.

MIDDLETOWN, N. Y.—The water commissioners have let the contract for a 3,000,000-gallon filter plant to the Continental Filter Co., 35 Wall St., New York. This will comprise a 1,000,000-gallon pressure plant of the Continental system, also a 2,000,000-gallon gravity plant, both contained in the same building.

SAVONA, N. Y.—T. C. Wall, Clk., writes us that the proposition to issue $15,000 in bonds for works was voted down June 10.

SCHENECTADY, N. Y.—Bids are asked until 10 a. m., June 24, for furnishing the necessary lead and packing and for laying about three miles of water pipe. W. J. Marlette, Secy. Water Comrs.

WHITESBORO, N. Y.—The Whitestone Water-Works Co. has been organized to build works to supply Whitesboro, Oriskany and New York Mills. About 11 miles of mains and 85 hydrants will be wanted, and a pumping station and reservoir built. The source of supply will be Black Creek. Capital stock, $50,000. W. G. Stone, Engr., Herald Bldg., Utica, N. Y.

HIGHBRIDGE, N. J.—L. J. Richardson, Oswego, N. Y., has been awarded the contract, at $12,649, for works.

BANGOR, PA.—The franchise and property of the Bangor Water Co. have been sold to the Citizens' Water Co., which has applied for a charter, with a capital stock of $80,000. W. R. Grubb, Pres.; W. M. Bennett, Secy.

GIRARD, PA.—Bids are asked until July 7 for furnishing the material and for constructing works and a light plant, as stated in our advertising columns. J. F. Witmer, Engr., Buffalo; C. J. Reeder, Clk.

LUZERNE, PA.—Councilman J. F. Killeen writes us that the town has made arrangements to take up the matter of constructing works.

PHOENIXVILLE, PA.—Bids are asked until June 29 for constructing a 5,500,000-gallon settling basin, and for making other improvements and extensions to the pumping station, as stated in our advertising columns. Alex. Potter, Engr., 137 Broadway, New York; N. J. Waitneight, Chn. Water Com.

WILMINGTON, DEL.—T. A. Leisen, Supt. Parks, has submitted plans for a stand-pipe of 500,000 gallons capacity, to be erected in Rockford Park. It will be 60 ft. high and 40 ft. in diameter.

BERRYVILLE, VA.—An election will be held June 29 to vote on the question of issuing $25,000 in bonds for works. D. H. Jones, Mayor.

WHEELING, W. VA.—The Baltimore & Ohio R. R. Co. proposes to build a reservoir near Belmont to cover about 15 acres and to be 8 ft. deep.

SALISBURY, N. C.—S. F. Lord, Mayor, writes us that the city proposes to buy the works. No engineer had been employed up to June 17. Population, 10,000.

FORT GAINES, GA.—Bids are asked by Joshua Jones, Cy. Clk., for sinking an artesian well. The council proposes to issue $20,000 in refunding bonds, and wishes to correspond with investors.

BASTROP, LA.—This city has voted to issue bonds for works and an electric plant, according to reports.

LAKE PROVIDENCE, LA.—A. B. Hider, U. S. Asst. Engr., Lake Providence Reach, is reported to have been engaged to prepare plans for works and an electric plant, to cost $17,500.

COLUMBUS, MISS.—Bids are asked until July 20 for furnishing the materials and for constructing new works and a sewerage system; estimated cost, $70,000. W. D. Humphries, Mayor; J. L. Ludlow, Engr., Winston, N. C.

FAYETTEVILLE, TENN.—Guild & Co., Chattanooga, Tenn., have been awarded the contract for constructing the works at $34,200.

NEW HAVEN, KY.—J. G. Barry, Mayor, writes us that no definite steps looking towards the construction of works has yet been taken; the matter being considered.

BATAVIA, O.—It is reported that this place will issue $50,000 in bonds for works and an electric plant. John Hillen, Mayor.

BUCYRUS, O.—The Bucyrus Water Co. is making surveys for a reservoir covering 25 acres north of this town.

FREEPORT, O.—Bids are asked until July 6 for constructing works, according to reports. Walter Jones, Clk.

GLOUSTER, O.—Bids are asked until June 28 for furnishing cast-iron pipe, hydrants, valves, lead, etc., for the works. The bids for these supplies received June 7 were rejected. J. A. Richards, Engr.

JACKSON, O.—The Jackson Water-Works Co. has been incorporated with a capital stock of $150,000 by Jas. Kinney, S. C. Boyer and other contractors, who were recently awarded the contract for building works.

LEBANON, O.—An election will be held July 10 to vote on the question of issuing $2,000 in bonds for new mains. F. M. Hamilton, Jr., Mayor.

LAKEWOOD, O.—Bids are asked until June 30 for furnishing the materials and for laying 6-in. water pipe, with hydrants, etc. John French, Clk.

VERSAILLES, O.—This place is reported as making arrangements for the construction of the proposed works and electric plant to cost $25,000. J. W. Reser, Clk.

MICHIGAN CITY, IND.—Bids are asked until June 30 for constructing works for the Lake Michigan Water Co., stated in our advertising columns. M. T. Krueger, Secy.

DURAND, MICH.—W. H. Putnam, Clk., writes us that no details for the proposed works have been decided upon; estimated cost, $30,000.

EAST JORDAN, MICH.—Bids are asked until July 10 for constructing works, as stated in our advertising columns. J. J. Gage, Chn. Com.

HARTFORD, MICH.—F. M. Deane, Clk., writes us that T. C. Brooks & Sons, Jackson, Mich., have been awarded the contract, at $11,727, for building the works.

BARTONVILLE, ILL.—H. E. Beasley, Engr. Hospital for the Insane, is said to be preparing plans for works at the hospital here.

KANKAKEE, ILL.—The Kankakee Water Supply Co., which recently secured control of the Kankakee Water-Works Co., will build filtration basins and make other improvements to the works, according to reports. W. G. Maxcy, Oshkosh, Wis., is interested.

KEWANEE, ILL.—Bids are asked until June 30 for furnishing and laying 3,240 ft. of 4 to 6-in water pipe, setting hydrants and valves, etc., for the [illegible] ment to the works. F. F. Whiffen, Pres. Bd. Local Improvements.

VANDALIA, ILL.—J. R. Schulte, Mayor, writes us that the contract will be let in July for about 1[illegible] miles of 6-in. water pipe and the necessary hydrants.

SUN PRAIRIE, WIS.—J. C. Fitch, Village Clk., writes us that an election will be held June 26 [illegible] on the question of issuing bonds for works. Population, 1,000. W. G. Kirchoffer, Engr., Baraboo, Wis.

HUDSON, IA.—This place voted June 12 to issue $5,000 in bonds for works. R. J. Nestor, Mayor.

MUSCATINE, IA.—Wm. Molis, Engr. and Supt. Muscatine Water-Works Co., writes us that no improvements to the works are as yet contemplated, except the laying in about three months, of half a mile of pipe.

OSKALOOSA, IA.—D. C. Waggoner, Cy. Clk., writes us that the council has engaged G. L. McKibben, Van Wert, O., as consulting engineer to investigate the water question and to make plans if necessary.

PRINCETON, MINN.—W. I. Gray & Co., Globe Bldg., Minneapolis, are reported to have been awarded the contract for constructing works and an electric plant at $17,000.

GRAND FORKS, N. DAK.—Bids are asked until July 3 for furnishing a pumping engine of one, two or three million gallons capacity, according to reports. F. A. Brown, Cy. Audr.

CLAYTON, MO.—It is stated that about all of the $25,000 required for building the works has been subscribed and that the St. Louis County Water-Works Co. will soon be organized. The water supply will be secured from the St. Louis works. L. G. McNair is interested.

MUSCOGEE, IND. TER.—H. M. Bent, Chicago, Ill., is reported to have submitted a proposition to the council to build works to cost about $70,000. It is thought the work will be begun in about 60 days.

CALGARY, N. W. TER.—Bids are asked until July 8 for the purchase of $90,000 of 30-year 4% bonds for constructing municipal works. Chas. McMillan, Cy. Treas.

SEWERAGE.

WATERBURY, VT.—V. K. Nash, Worcester, Mass., has submitted a report for a system to cost about $22,000. President Moody and City Clerk Colby may be addressed.

HUDSON, MASS.—Ralph E. Joslin, Dr. J. L. Harriman and D. W. Stratton are on the committee appointed to investigate the question of building a system to cost about $150,000. A pumping station and sewage disposal beds will be required.

QUINCY, MASS.—Bids are asked by the commissioners until June 26 for constructing 8,000 ft. of 18 to 8-in. pipe sewers. E. W. Branch, Engr.

WESTBORO, MASS.—Bids are asked by the sewer commissioners until July 10 for furnishing the material and for reconstructing a portion of the outfall sewer, as stated in our advertising columns. J. J. Van Valkenburg, Engr., South Framingham, Mass.

COHOES, N. Y.—Bids are asked until July 5 for constructing section 2 of the system, as stated in our advertising columns. Ed. Hayes, Engr.; W. J. Elliot, Clk.

ELMIRA, N. Y.—J. E. Rawlins, Cy. Engr., writes us that 3,480 ft. of 12-in. and 400 ft. of 15-in. pipe sewers will be built in College Ave. and Webster Place.

JAMESTOWN, N. Y.—A report has been submitted for new sewers to cost about $60,000. Address Aldermen Johnson and Fenton.

NEWBURG, N. Y.—Dwyer & Sager have been awarded the contract, at $8,841, for building the North St. sewer.

NEW YORK, N. Y.—Bids are asked by Jas. Kane, Comr. of Sewers, 13 Park Row, until June 28, for constructing sewers in six streets.

TROY, N. Y.—Bids are asked until June 30 for constructing a 48-in. brick sewer. E. O. Ross, Secy. Bd.

EAST ORANGE, N. J.—Bids are asked until July 10 for constructing a storm water conduit or sewer in the Valley of Black Brook, East Orange, as described in our advertising columns. Stephen M. Long, Township Clk.

HACKENSACK, N. J.—Bids are asked until July 10 for constructing flat top and pipe sewers, as stated in our advertising columns. Jacob Bauer, Secy. Comn.

CARMEL, PA.—The council, it is stated, is in favor of building a system.

SOMERSET, PA.—Bids are asked by the town council until July 12 for the construction of about five miles of sewers, as stated in our advertising columns. J. Watson Frease, Pres. James S. Haring, Engr.

NEWPORT NEWS, VA.—Bids are asked until July 20 for constructing about 17,000 ft. of pipe sewers. J. A. Massie, Cy. Clk.

GAINESVILLE, FLA.—Jas. M. Graham writes us that several citizens of this place have asked the council for a franchise for a system.

BIRMINGHAM, ALA.—It is proposed to construct certain sewers, at a cost of $4,000. F. C. Evans, Cy. Clk.

COLUMBUS, MISS.—Bids are asked until July 20 for constructing a system and water-works. J. L. Ludlow, Engr., Winston, N. C.

MEMPHIS, TENN.—A. T. Bell, Cy. Engr., writes us that the city will build about 20 miles of 27 to 6-in. pipe sewers this season; the work to be done by day labor.

CLEVELAND, O.—Bids are asked until July 13 for constructing sewers in two streets. W. P. Rice, Dir. Wks.

DAYTON, O.—Bids are asked until June 27 for laying sewer connections and water pipe. R. H. Ferguson, Cy. Comptroller.

EAST LIVERPOOL, O.—Bids have been asked for constructing sewers in district 2. F. H. Croxall, Secy. Comrs.

MARION, IND.—Bids are asked until July 4 for constructing sewers in two streets. C. G. Robbins, Cy. Clk.

NORTH VERNON, IND.—The council is reported to have ordered plans for a system.

UNION CITY, IND.—Bids are asked until June 29 for constructing a sewer. G. A. Rosenbush, Cy. Clk.

BATTLE CREEK, MICH.—The council is reported to have voted to build a sewer to cost about $13,000.

MOLINE, ILL.—Local papers state that work will soon be begun on the proposed main sewer, to cost about $19,000. Address City Engineer Paddock.

PRINCETON, ILL.—Bids are asked by the city clerk until June 28 for constructing a main outlet sewer, with 29 brick manholes, etc. Alvord & Shields, Engrs., 127 Hartford Bldg., Chicago.

OSKALOOSA, IA.—D. C. Waggoner, Cy. Clk., writes us that G. L. McKibben, Van Wert, O., has been engaged to prepare plans for a system.

CHARLES CITY, IA.—W. S. Prouty, Mayor, writes us that the city expects to ask for bids at once for constructing about two miles of sewers. W. D. Lovell, Consult. Engr., Des Moines.

HUDSON, WIS.—M. Herrick, Cy. Clk., writes us that at the election in April this place voted against building a system. A report states that a petition is before the council to call another election to vote on the question of issuing $7,500 in bonds for a system.

WAUWATOSA, WIS.—The county board of supervisors, Milwaukee, have voted to accept the proposition of G. Steinhagen to install a sewage disposal plant at the county buildings here, to cost about $14,000.

MINNEOTA, MINN.—Bids are asked until June 29 for constructing sewers. M. B. Haynes, Engr., Mankato; H. N. Dahl, Pres. Council.

ST. CLOUD, MINN.—Bids are asked until July 17 for constructing about three miles of pipe sewers, to cost about $12,400. S. S. Chute, Cy. Engr.; J. A. Martin, Cy. Clk.; O. F. Doyle, Chn. Com.

SEATTLE, WASH.—Bids were received by the council June 21 for constructing the East Pine St. sewer, to cost about $38,500.——Bids will also soon be asked to construct the Queen Anne Hill district sewer, at a cost of about $12,000.

WATSONVILLE, CAL.—E. F. Wyckoff, Pres. City Council, writes us that this city voted June 10 to issue $40,000 in bonds for a system. The bonds will be sold and the contract let as soon as possible, as it is wished to complete the system before the wet weather opens.

WALLACE, IDAHO.—Bids are asked until July 10 for constructing a system, to cost about $18,000. J. C. McDiarmid, Cy. Clk.

STRATFORD, ONT.—W. F. Van Buskirk, Cy. Engr., writes us that plans and a report for sewage disposal have been approved by the provincial board of health. Recommendations by consulting engineer have been sent to the council, but no action has yet been taken. There will be small size settling tanks and filters; estimated cost, $21,000.

MONTREAL WEST, QUE.—This place voted June 10 to issue $60,000 in bonds for a system.

STREETS AND ROADS.

NORWOOD, MASS.—It is stated that the town has voted $2,300 for the purchase of a stone crusher.

WINCHESTER, MASS.—Reports state that plans and specifications for building Highland Ave. extension are being prepared and that bids will soon be asked; estimated cost, $30,000.

CHESTER, CONN.—It is reported that the town has voted to macadamize about 2,100 ft. on Main St.

BINGHAMTON, N. Y.—Bids are asked until July 3 for brick or asphalt paving on Hawley St. S. D. Kane, Cy. Clk.

BUFFALO, N. Y.—Bids are asked by the Department of Public Works until June 29 for paving Curtiss St. from Broadway to William St. R. G. Parsons, Secy.

EAST AURORA, N. Y.—O. J. Gardner, Town Clk., informs us that an appropriation of $31,000 has been voted, but that no work will be done this year. Geo. Holisted, Civil Engr.

FREDONIA, N. Y.—It is stated that James P. Morrissey, Engr., has been instructed to prepare plans and specifications for brick, asphalt or macadam pavement on Central Ave.

MOUNT VERNON, N. Y.—Bids are asked until July 5 for the improvement of East Fourth St. from Union to Columbus Ave. Edwin W. Fiske, Mayor.

NIAGARA FALLS, N. Y.—The following bids for paving on Pine Ave. were received June 9: Barber Asphalt Paving Co., $51,495; American Contract Co., of Buffalo, $51,516; Henry P. Burgard, $47,016.

ROME, N. Y.—Bids are asked by the common council until July 3 for the construction of about 10,000 sq. yds. of brick paving, as stated in our advertising columns.

LONG BRANCH, N. J.—Press reports state that the board of commissioners on June 15 passed a resolution giving the Barber Asphalt Paving Co. a ten-year contract to repair three miles of street, at an annual cost of $5,000.

JERSEY CITY, N. J.—Bids are asked until June 27 for the construction of about 6,500 yds. of asphalt and about 10,000 yds. of Belgian paving. G. T. Bouton, Cy. Clk.

BETHLEHEM, PA.—It is reported that the contract for reconstructing and improving the public highway between Bethlehem and Nazareth, a distance of eight miles, has been let to the Delaware River Quarry & Construction Co. of Jersey City, at about $40,000.

LATROBE, PA.—Bids are asked until June 26 for brick paving in North Ligonier St. from the Pennsylvania R. R. north to the Borough line. L. W. Fogg, Engr.

PHILADELPHIA, PA.—Reports state that the park commissioners have recommended the appropriation of $25,000 for completing the macadamizing of Lincoln Ave. from Wissahickon Ave. to Johnson St.

WILKESBARRE, PA.—Bids are asked until June 24 for taking up the chestnut block pavement and replacing same with brick on six streets. Frank Dietrick, Cy. Clk.

MILFORD, DEL.—Theo. Townsend, Clk. Council, writes us that the town will pave one street with fire brick and grade two others, in July and August. T. C. Hatton, Consult. Engr., Wilmington.

BALTIMORE, MD.—Reports state that ordinances have been introduced for repaving to cost $500,000.

NEW ORLEANS, LA.—Bids are asked until June 26 for asphalt and Belgian block paving in five streets. W. S. Douglass, Comptroller.

RHEA SPRINGS, TENN.—Bids are asked by the Road Committee of Rhea county until June 24 for building a turnpike road. J. C. Wasson, Chn.

CHILLICOTHE, O.—Bids are asked until July 5 for paving with brick and asphalt, as stated in our advertising columns. H. M. Redd, Cy. Engr.

DAYTON, O.—Bids are asked until July 13 for the construction of about 8,000 sq. yds. of block or asphalt pavement. Robt. H. Ferguson, Comptroller.

LIMA, O.—Bids are asked until July 14 for about 6,700 sq. yds. of paving. C. E. Lynch, Cy. Clk.

MANSFIELD, O.—Bids are asked until July 8 for the improvement of two streets. F. M. Remy, Cy. Clk

TOLEDO, O.—Bids are asked until July 17 for block paving in Orange and Rosalind Sts. and in Melrose Ave. Wm. O. Holst, Cy. Clk.

YOUNGSTOWN, O.—Bids are asked by the city commissioners until July 8 for paving Spring St. from Wick Ave. to Holmes St. C. E. Cross, Clk.

EVANSVILLE, IND.—Reports state that the board of public works has ordered City Engineer Saunders to prepare plans and specifications for improving nine streets; estimated cost, about $80,000.

INDIANAPOLIS, IND.—Bids are asked by the department of public works until June 26 for paving in nine streets with asphalt and wooden block pavement. M. A. Downing, Chn.

MARION, IND.—Bids are asked until July 4 for brick paving in Second St. and in Delphi Ave. C. G. Robbins, Cy. Clk.

ROCKVILLE, IND.—Bids are asked by the commissioners of Parke county until July 6 for the improvement of six roads in Jackson township. S. A. Pike, Audr.

SCOTTSBURG, IND.—It is stated that the contract for building 15 miles of macadamized road in Jennings township has been awarded to Thomas Carlisle and Charles E. Close, at $16,170.

SOUTH BEND, IND.—Bids are asked until July 10 for paving with cement the sidewalks in six streets. L. A. Hull, Cy. Clk.

SULLIVAN, IND.—Press reports state that S. P. Bennett, Paris, Ill., has been awarded the contract for constructing 17½ miles of roads in Gill township, at $53,200.

VEEDERSBURG, IND.—Bids are asked until June 28 for brick paving on Second and Main Sts. I. J. Walker, Town Clk.

VERNON, IND.—Bids are asked until June 27 for the construction of about 11½ miles of pike road in Campbell township and until June 28 for the construction of about eight miles of pike road in Jennings township. James Renie, Audr. Jennings County.

WASHINGTON, IND.—Phil. Hart, Cy. Clk., writes us that the city has voted against issuing bonds.

DETROIT, MICH.—Bids are asked until June 23 for the improvement of Joseph Campau Ave., and until June 24 for the construction of about 20,000 sq. yds. of cedar and brick paving. D. W. H. Moreland, Pres. Bd.

CAIRO, ILL.—It is stated that the paving of Ohio Levee St. is being considered.

MADISON, WIS.—Bids are asked until July 1 for improving several streets, according to reports. O. S. Norsman, Cy. Clk.

ST. PAUL, MINN.—In our issue of June 1 we referred to bids received for asphalt paving, which should have been for brick; the contract for brick paving in Seventh St. being let to Fielding & Shepley, at $18,590.

WINONA, MINN.—Paul Kemp, Cy. Clk., writes us that it is proposed to pave 2,611 sq. yds., at a cost of $3,510.

DENVER, COLO.—Bids are asked by the board of public works until June 27 for paving in District No. 1. Wm. H. Taylor, Secy.

RATHDRUM, IDAHO.—Bids are asked by the county commissioners until July 10 for building the Santa Mountain Road. John C. Callahan, Clk. of Bd.

OTTAWA, ONT.—Press reports state that Ayers & Moneyhun have been awarded a contract, at $8,571, for constructing gravel road between Madison and Hamilton.

ST. MARY'S, ONT.—Bids are asked until June 26 for constructing about 6,000 sq. ft. of granolithic sidewalks. L. Hartshorne, Town Clk.

HAMBURG, GERMANY.—Press reports state that the city proposes to construct cycling paths throughout, at a cost of 243,000 marks.

MANUFACTURING PLANTS.

MILTON, VT.—McCaghey & Linehan, Glen Falls, N. Y., are reported to have been awarded the contract for erecting an addition to the new pulp mill of the International Paper Co., at Milton, to cost about $60,000.

MONACA, PA.—The Phoenix Glass Co. is said to contemplate the erection of a new 12-pot furnace and eight new decorating kilns.

PHILADELPHIA, PA.—Bids are being received, according to reports, for erecting a textile factory building, 54 × 130 ft., for Thomas Halton's Sons, at C St. and Allegheny Ave.——The 4-story building of the Phoenix Paint & Brush Co., at 218 North 2d St., was destroyed by fire June 18; loss, $60,000.

LYNCHBURG, VA.—It is reported that the Lynchburg Cotton Mill Co. is receiving bids for the erection of a new building.

NEWBERRY, S. C.—James McIntosh, L. W. Floyd and others, of Newberry, contemplate the erection of a new cotton mill in this city with a capacity of 10,000 spindles.

ENSLEY, ALA.—The Tennessee Coal, Iron & R. R. Co. is said to be receiving estimates for the construction of a fifth furnace at Ensley.

CHATTANOOGA, TENN.—Press reports of June 17 state that S. M. Bourne and S. Coolidge, who represent the Stark Cotton Mill Co., are in town accompanied by officials of the Southern Ry. Co. looking for a site on which to erect a mill having 40,000 spindles; estimated cost of all buildings, etc., $1,500,000.

BRYAN, TEX.—It is reported that a new press and a new engine will be installed in the oil mill at this place, increasing the capacity to 75 tons of seeds a day.

GAS PLANTS.

MADISON, IND.—Press reports state that the Chicago Pipe Line Co. has let the contract for the erection of a new $200,000 pumping station at Howell Corner, Liberty township, Grant county.

MARINE CITY, MICH.—Reports state that the council has granted a franchise for the operation of a plant to J. T. Lynn, F. D. Jenks and A. D. Bennett, and the construction will be commenced immediately.

MASON CITY, IA.—It is stated that the Mason City Electric Co. is about to construct a gas plant. L. J. Fitch, Secy. and Treas.

VANCOUVER, B. C.—It is reported that the Vancouver Gas Co. has definitely decided to extend its manufacturing and distributing plants this season; estimated cost of improvements, $100,000.

LAMP POSTS.—Washington, D. C.—Bids are asked by the district commissioners until June 24 for furnishing 300 cast-iron lamp posts.

BOILERS.—Columbus, O.—Bids are asked until July 3 for three horizontal tubular boilers. Otis K. Ellis, Supt. Bd. of Infirmary Directors.

AUXILIARY VESSELS.—Washington, D. C.—Bids are asked by the navy department until July 19 for the purchase of six vessels used in the war with Spain.

REBUILDING MONUMENT.—Springfield, Ill.—Bids are asked until June 26 for taking down and reconstructing the Lincoln Monument. Samuel A. Bullard, Arch.

DREDGING.—Boston, Mass.—Bids are asked until July 21 for dredging in Plymouth Harbor, as stated in our advertising columns. Col. Chas. R. Suter, U. S. Engrs.

DRY DOCK.—Washington, D. C.—Bids are asked by the navy department until Aug. 5 for the construction of timber dry dock at League Island navy yard, Philadelphia, Pa.

BREAKWATER.—Mexico, Mex.—It is reported that the government has let the contract for harbor work at Manzanillo to Wm. K. Smoot, Washington, D. C., at about $6,000,000.

DRAINAGE DITCH.—Wapakoneta, O.—Bids are asked until June 24 for the construction of four ditches with a total excavation of about 15,550 cu. yds. Samuel Craig, Engr.

DREDGING.—Norfolk, Va.—Bids are asked until July 21 for dredging and bank protection in waterway from Norfolk, Va., to Sounds of North Carolina. Major Thos. L. Casey, U. S. Engrs.

DREDGING.—New York, N. Y.—Bids are asked until July 19 for dredging in Bay Ridge and Red Hook channels, as stated in our advertising columns. Major H. M. Adams, U. S. Engrs.

SNAGBOAT AND HULL.—Little Rock, Ark.—Bids are asked until July 15 for furnishing one steel snagboat and one steel hull, as stated in our advertising columns. Lieut. Robert McGregor, U. S. Engrs.

PORTLAND CEMENT.—Mobile, Ala.—Bids are asked until July 20 for furnishing and delivering hydraulic Portland cement, gravel and sand, at McGrew's Shoal, Ala., as stated in our advertising columns. Major Wm. T. Rossell, U. S. Engrs.

SWAMP DRAINAGE.—Newark, N. J.—Bids are asked by the board of street and water commissioners until July 20 for draining the swamp or meadow lands lying within the Ninth, Tenth and Twelfth wards, as stated in our advertising columns. Wm. E. Greathead, Clk. Bd.

DAM, ROADWAY AND BEAR PIT.—Indianapolis, Ind.—The following bids were received June 9 for the construction of the dam in White River, a roadway from the dam to 30th St. and a bear pit: White River Sand Co., roadway, $51,000; Riverside Construction Co., dam and roadway complete, $83,550; Koss & Fritz, dam, stratified stone, $50,742; oolitic, $54,393; oolitic, with stratified apron, $53,843; M. M. Defrees, dam, $46,000; Meridian Construction Co., roadway, $68,750; D. Foley, dam, $54,960; Park Construction Co., dam, $41,530; roadway, $52,802; total, $94,332. The bids for building the bear pit were: H. W. Tielking, $2,535; T. Roch, $2,500; Koss & Fritz, $1,428.

WASHINGTON, D. C.—Col. Chas. J. Allen, U. S. Engrs., in a report approved by the Chief of Engineers and the Secretary of War, has recommended that of the $100,000 appropriated by Congress for the improvement of the Potomac River, $74,000 be allotted for improving by dredging and back-filling in front of the city near the Long Bridge, and $26,000 for dredging the river below. In front of the city the Georgetown channel is to be dredged to 20 ft. at low tide, and the flats on the Virginia side filled. The estimated cost of the improvement, including the construction of a tidal reservoir with gates, the construction of a sea wall in front of the city and the filling in of about 400 acres between the wall, was $2,953,029; appropriations up to date have been $2,285,000. On the lower river the project is for a channel 200 ft. wide and 24 ft. deep at low tide. To effect this dredging will have to be done at the following points: Kettle Bottom Shoals, estimated cost, $1,320; Maryland Point Shoal, $30,175; Smith Point Shoals, $33,000; Mattawoman Shoal, $9?,885; total, $158,400.

CONTRACT PRICES.

EXCAVATION AND MASONRY.—Boston, Mass.—The Metropolitan Water Board, Boston, received the following bids June 15, 1899, for preliminary excavation and masonry for the Wachusett dam; bid of Busch Bros. accepted:

Bidder.	Excavation—Earth, 13,000 cu.yds.	Excavation—Rock, 4,000 cu.yds.	Stone masonry, 1,000 cu.yds.	Total.
Busch Bros., Buffalo	$0.20	$0.98	$6.25	$12,770
Brodhead Con. Co., Easton	.30	1.00	6.40	14,300
Long & Little, Leominster	.26	1.45	5.50	14,680
Murphy & Co., Clinton, Mass	.33	1.25	9.00	18,290
Moulton & O'Mahoney, Bostn	.22	2.00	8.00	18,860
A. M. Banker, Gloversville	.30	2.25	6.50	19,400
C. N. Taylor, Clinton, Mass.	.40	2.20	7.50	21,500
Ross & Fowler, Boston	.35	2.75	8.00	23,550
Rowe & Hall, Boston	.60	2.20	8.00	24,600
Merryman & McNiece, N.Y.	.35	2.00	13.50	26,050
D. Cuozzo, Brooklyn	.70	3.50	7.75	30,850

DRAINAGE OF POND.—Stoneham, Mass.—The Metropolitan Water Board received the following bids June 6 for the drainage of Spot Pond, Stoneham, as advertised in Engineering News, and the contract was awarded C. E. Trumbull & Co.:

Bids Received at Boston, Mass., June 6, 1899, for Draining Spot Pond, Stoneham.

Quantities.	C. E. Trumbull & Co., Boston.	Geo. M. Bacon, Boston.	M. Russo, & Co., Boston.	Brupo & Salamone E. Boston.	Mirick & Wentworth, Malden.	Richard Falvey, Somerv'le.	H. A. Hanscom & Co., Boston.
Earth excavation for conduit, 9,500 cu. yds.	$0.60	$0.55	$0.60	$0.74	$0.66	$0.75	$0.75
Earth excavation for open channel, 5,000 " "	.50	.28	.50	.74	.36	.75	.90
Borrowed earth, 1,700 " "	.40	.28	.50	.40	.36	.40	.40
Rock excavation, 500 " "	2.50	4.90	4.00	3.95	5.00	5.00	4.50
Masonry: Portland cem. concrete, 580 " "	7.50	8.90	7.00	8.50	8.50	9.50	7.50
Brick, laid in Portland cement, 40 " "	14.00	17.50	16.00	20.00	16.00	18.00	14.00
Laying pipe: 30-in. cast-iron, 2,400 lin. ft.	.88	1.00	1.70	.85	.95	.75	1.00
24-in. and 12-in. cast-iron, 350 " "	.60	.60	1.00	.85	1.50	.75	1.00
And furnishing, 24-in. vitrified, 1,600 " "	1.06	1.50	1.30	.80	1.90	1.25	1.50
Stone paving, 2,200 sq. yds.	1.00	.50	.40	.65	1.30	.80	.80
Spruce lumber in foundations, 40 M. ft.	35.00	40.00	28.00	40.00	45.00	40.00	40.00
Total	$22,508	$22,945	$24,120	$25,593	$27,087	$27,518	$27,825

MISCELLANEOUS CONTRACTS.

SHAFT.—Pottsville, Pa.—A shaft 900 ft. deep will be sunk at the Lincoln colliery, near here, according to reports.

CRUISERS.—Washington, D. C.—Bids are asked by the navy department until Oct. 2 for constructing six protected cruisers.

FIRE BELL, ETC.—Hoboken, N. J.—Bids are asked until June 27 for the purchase of fire tower and bell. John F. Keating, Clk.

ROAD WORK, ETC.—West Boylston and Sterling, Mass.—The Metropolitan Water Board, Boston, awarded the following contract May 31, 1899, to Peter J. O'Malley, Waltham, Mass., for excavating soil and for building a road in West Boylston and Sterling, as advertised in Engineering News: Earth excavation, 35,000 cu. yds., 24½ cts.; rock excavation, 2,000 yds., $1.25; slope paving, 2,000 yds., 90 cts.; rubble masonry laid dry, 10 yds., $1.50; rubble masonry, laid in mortar, 100 yds., $4.00; split-stone masonry laid in mortar, 60 yds., $20.00; laying 5-in. pipe for side drains, 1,000 lin. ft., 15 cts.; 12-in.,

for culverts, 40 ft., 25 cts.; 15-in., for culverts, 45 ft., 25 cts.; 24-in., for culverts, 82 ft., 25 cts.; overhaul, equivalent to 351,000 cu. yds. hauled 100 ft., 0.9 ct.; total, $17,841.

SEWERAGE SYSTEM.—New Brighton, Pa.—We are informed that the following bids were received June 8 for constructing a sewerage system, as advertised in Engineering News; contract awarded the Wagner Water Supply Co.; L. E. Chapin, Consult. Engr., Canton, O.:

Bids Received at New Brighton, Pa., June 8, 1899, for Constructing a Sewerage System.

Items.	Vetter & Heasley, Youngstown, O.	Fell & Costa, Orange, N. J.	Albert M. Banker, Gloversville, N. Y.	Cona Accetta, Pittsb'g, Pa.	Greenville Const'n Co., Greenville, O.	Wagner Water Supply Co., Dayton, O.	Chas. Rosser & Co., Bellaire, O.	C. I. Horrold, Beaver Falls, Pa.
Sewer pipe, laid complete:								
6-in., a lin. ft.	$0.40	$0.30	$0.55	$0.44¾	$0.30	$0.29	$0.28	$0.45
8-in., " "	.50	.48	.56	.47	.36	.33	.66	.52
10-in., " "	.55	.45	.62	.52	.40	.42	.58	.60
12-in., " "	.71	.65	.66	.62	.75	.53	.85	.65
15-in., " "	.58	.71	.84	1.09	.78	.55	.53	.85
18-in. " "	.98	1.03	.95	1.05	1.32	.87	1.28	.95
Drain tile laid complete: 6-in., a lin ft.	.20	.18	.06	.24	.05	.10	.06	.09
8-in., a lin. ft.	.26	.21	.08	.29	.08	.12	.10	.12
10-in., " "	.33	.25	.11	.35	.12	.15	.14	.15
12-in., " "	.40	.30	.13	.38	.15	.20	.14	.25
Manholes built, a lin. ft.	3.25	3.25	2.50	2.65	3.00	3.40	3.00	3.40
Flushtanks built, each	40.00	47.00	40.00	60.00	30.00	37.00	33.00	35.00
Rock excavation, a cu. yd.	1.00	2.00	1.25	2.14	2.50	2.00	1.75	2.50
Extra earth excavation, per cu. yd.	.40	.50	.50	.45	.40	.60	.40	.30
Concrete per cu. yd.	3.50	4.00	5.00	6.70	4.00	4.00	4.50	4.25
Plank, a M. ft., B. M.	18.00	20.00	25.00	18.50	25.00	22.00	14.00	20.00
Total	$54,939	$53,149	$54,682	$54,421	$43,999	$40,755	$63,236	$54,510

BRICK PAVING.—Champaign, Ill.—The following bids were received June 13, 1899, for paving University Ave., from Neil St. to New St.; 1—J. W. Stipes, Champaign, Ill.; 2—G. Maffoli, Rockford, Ill.; 3—Crews, Lough & Allison, Arcola, Ill.; 4—Norton & Gilmore, Terre Haute, Ind.; 5—Foster & Co., Attica, Ind.; W. T. Tarrant, Cy. Engr.:

		1	2	3	4	5
Excavation	4,500 cu. yds.	$0.19	$0.20	$0.18	$0.20	$0.18
Concrete, crb.&c.	6,050 lin. ft.	.42	.40	.43	.43	.48
Poston block*	11,360 yds.	1.32	1.31	1.33	1.31	1.315
Springfield*		1.28	1.31	....	....	1.315
Poston block†		1.18	1.19	1.18	1.21	1.20
Clinton†		1.15	1.19	....	....	....
Springfield†		1.14	1.19	....	....	1.20
10-in. drain§	300 lin. ft.	.17	.25	.30	.20	.28
Catchbasins:						
3.5 ft. diam.	14 each.	3.25	3.50	4.00	4.50	3.00
4.0 ft. diam.		3.60	3.75	4.50	....	3.50

*On 6-in. broken stone concrete. †On 6-in. gravel concrete. §Average cut, 3 ft.

The bids for paving University Ave, from New St. to Prospect Ave., were the same, Norton & Gilmore alone not bidding. The quantities were as follows: Excavation, 1,800 cu. yds.; concrete curb and gutter, 2,120 yds.; paving, 3,650 yds.; 10-in. drain, 200 ft.; catchbasins, 4.

ASPHALT PAVING.—New Orleans, La.—The General Asphalt Co. has been awarded the contract for asphalt paving in Chartres St., from Canal to St. Louis St., at $2.22 a sq. yd. The Barber Asphalt Paving Co. has the contract for paving Chartres St., from St. Louis to St. Ann St., at $2.26.

DREDGING.—New Bedford, Mass.—The following bids were received June 8, 1899, by Maj. D. W. Lockwood, U. S. Engr., for dredging in New Bedford Harbor, as advertised in Engineering News: Draw Channels—The International Contracting Co. (Wm. H. Sayre, Jr., Mgr.), New York, 18¾ cts. a cu. yd.; The Hartford Dredging Co., Hartford, Conn., 19 cts.; Cole Bros., Fall River, Mass., 17⅞ cts. Anchorage Area—The International Contracting Co., New York, 17 cts.; Cole Bros., Fall River, Mass., 17½ cts.; Hartford Dredging Co., Hartford, 16 cts.

WALLS AND EMBANKMENTS.—Stoneham, Mass.—The Metropolitan Water Board, Boston, received the following bids June 15 for the masonry core walls and earth embankments for dams at Spot Pond, Stoneham; the contract was awarded the Brodhead Contracting Co.:

DREDGING.—Cleveland, O.—We are informed that the following bids were received June 9, 1899, by Col. J. A. Smith, U. S. Engr., for dredging in Cleveland Harbor, as advertised in Engineering News: The Buffalo Dredging Co., Buffalo, N. Y., 14.5 cts; James Rooney, Toledo, O., 12.75 cts.; The L. P. & J. A. Smith Co., Cleveland, O., 12.875 cts.; W. A. McGillis Co., Cleveland, O., 11.95 cts., recommended for acceptance; Carkin, Stickney & Cram, Detroit, Mich., $16 cts.; G. H. Breymann & Bros., Toledo, O., 13 cts.

BRICK PAVING.—White Plains, N. Y.—The contract for 8,860 yds. of brick paving on 6-in. concrete foundation, and 4,065 lin. ft. of curbing, has been let to McCabe & Duffy, White Plains, at $2.18 for Porter repressed brick, and at 52½ cts. for curbing.

REPAIRING PIER.—Holland, Mich.—We are informed that the following bids were received June 9 by Capt. Chester Harding, U. S. Engr., Grand Rapids, Mich., for repaving the government pier at Black Lake, Holland, Mich., as advertised in Engineering News:

Bids Received at Holland, Mich., June 9, 1899, for Repairing Government Pier at Black Lake.

Quantities.		Nelson J. Gaylord, Ludington, Mich.	Adolph Green, Green Bay, Wis.	Robert Love, Muskegon, Mich.	Smith & Nelson, Muskegon, Mich.
Cut down and remove old work	407 lin. ft..	$1.50	$1.25	$1.50	$1.50
Material, furnished by government, in place	5,280 ft. B.M.	5.00	5.00	5.00	4.00
Furnished and in place: White oak round piles	11,654 lin. ft..	.35	.33	.30	.32
White oak timber	15,200 ft. B.M.	38.00	38.00	32.00	37.00
White pine timber	147,540 " "	24.00	25.00	24.00	25.00
White pine plank for sheet piles	342,324 " "	34.00	33.00	29.50	36.00
White pine plank for decking	18,384 " "	20.00	20.00	18.00	20.00
Iron or steel drift bolts	11,269 lbs....	.03¼	.03	.03	.03½
" screw bolts	14,155 "	.03¼	.03½	.03	.03½
" carriage bolts	9,140 "	.03¼	.03½	.03½	.03½
" tie rods	19,020 "	.03¼	.03½	.03	.03½
" spikes	2,059 "	.03¼	.03	.03	.03½
Stone	400 cords...	6.00	6.65	7.00	7.00
Stone, as per paragraph 67 of specification	300 " ..	4.00	6.25	3.00	5.00
Total		$26,249	$26,727	$24,004	$27,550

ASPHALT PAVING.—Camden, N.J.—We are informed by B. H. Shivers, Clk. Highway Dept., that the following contracts have been let to the Vulcanite Paving Co., Philadelphia, for asphalt paving, (1) being for grading concrete foundation and paving with asphalt, 10-year guarantee; (2) new 24-in. crossing stone; (3) new 16-in. crossing stone, (4) new curbstone, a lin. ft.; (5) new gutter stone, a lin. ft.; (6) circular curb, a lin. ft.; (7) repaving, including gutters and crossing; (8) resetting curb and repair of sidewalk; (9) resetting gutter stone, Fifth St., from Bridge Ave. to Chestnut St., and Newton Ave., from Kaighn Ave. to Broadway, (1) $2.53; (2) $1.05; (3) 85 cts.; (4) 55 cts.; (5) 40 cts.; (6) $1.40; (7) 27 cts.; (8) 21 cts. a lin. ft.; (9) 16 cts. a lin. ft. Delaware Ave., from State to Wood St., (1) $2.54; all other bids the same as above. 3d St., Market to Federal St., (1) $2.53; all other bids the same as above.—Bids were received as follows for asphalt paving in several other streets, the contracts not being let up to June 12: W. S. P. Shields, Philadelphia, Arch St., (1) $2.58; (2) 75 cts.; (3) 50 cts.; (4) 55 cts.; (5) 40 cts.; (6) $1.35; (7) 25 cts.; (8) 12 cts.; (9) 5 cts. 6th St., (1) $2.43; all other bids as above. State St., (1) $2.48; all other bids as above. Vulcanite Paving Co., 6th St. and State St., (1) $2.51; all other bids the same as first bids. Pennsylvania Asphalt Co., Philadelphia, 6th St. and State St., (1) $2.57; (2) $1.08; (3) 85 cts.; (4) 58 cts.; (5) 40 cts.; (6) $1.43; (7) 25 cts.; (8) 20 cts.; (9) 16 cts.

IMPROVING HARBOR.—Chicago, Ill.—Maj. W. L. Marshall, U. S. Engr., received the following bids June 15 for dredging and for other work in Chicago Harbor, as advertised in Engineering News:

Bids Received at Boston, Mass., June 15, 1899, for Dams at Spot Pond, Stoneham.

Bidder.	Excavation.—Earth, 7,600 cu.yds.	Excavation.—Rock, 400 cu.yds.	Borrowed earth, 6,000 cu.yds.	Cement concrete—masonry—Am. nat. hydr'lic, 900 cu.yds.	Cement concrete—masonry—Portland, 1,650 cu.yds.	Plastering of Portland cement, 2,400 sq.yds.	Total.
Brodhead Contracting Co., Easton, Pa.	$0.45	$1.50	$0.30	$5.50	$6.85	$0.40	$23,033
J. Driscoll & Son, Brookline, Mass.	.50	3.00	.30	5.00	7.10	.75	24,815
C. E. Trumbull & Co., Boston	.50	3.75	.40	5.00	7.00	.50	24,950
Merryman & McNiece, New York.	.75	5.00	.40	5.00	6.00	.50	25,700
D. Cuozzo, Brooklyn, N. Y.	.75	4.00	.30	5.25	7.40	.30	26,755
Richard Falvey, Somerville, Mass.	.70	4.00	.50	5.00	7.00	.40	26,930
Frank L. Allen, Worcester, Mass.	.70	5.00	.42	5.00	7.00	.70	27,570
M. Russo & Co., Boston,	.60	3.50	.50	6.00	8.00	.50	28,760
Harris & Letteney, Boston.	.63	2.60	.65	6.34	7.39	.60	29,068
The United Co., New York, N. Y.	.63	3.75	.38	5.75	8.35	.65	29,081
Chas. N. Taylor, Clinton, Mass.	1.00	5.00	.40	5.00	7.50	.50	30,075
Mirick & Wentworth, Malden, Mass.	.86	6.00	.44	5.30	7.30	.77	30,239
H. A. Hanscom & Co., Boston.	.95	5.00	.50	6.50	7.75	.50	32,058

BREAKWATER.—Conneaut Harbor, O.—Col. Jared A. Smith, U. S. Engr., Cleveland, O., received the following bids June 12 for constructing portion west breakwater, 216 ft. long, at Conneaut Harbor, O., as advertised in Engineering News; A.—The L. P. & J. A. Smith Co., Cleveland; B.—Jas. B. Donnelly, Buffalo (accepted); C.—E. J. Hingston, Buffalo, N. Y.; D.—J. J. Churchyard, Buffalo, N. Y.:

	A.	B.	C.	D.
Dredging, a cu. yd.	$0.40	$0.30	$0.60	$0.40
Hemlock, a M. ft.	21.00	17.00	20.00	20.00
White pine, a M. ft.	36.00	27.00	30.00	29.50
White oak, a M. ft.	45.00	42.00	32.00	60.00
Filling stone, a cord	1.60	1.18	1.00	1.20
Heavy rip-rap, a yd.	2.00	1.70	1.75	1.50
Iron rods, a lb.	.04	.03	.04	.04
Drift bolts, a lb.	.04	.03	.03	.04
Screw bolts and washers	.04	.04	.04	.04
Lag screws, a lb.	.04	.04	.05	.04
Spikes, a lb.	.05	.04	.04	.04
Iron strap plates, a lb.	.04	.04	.05	.04
Total	$29,443	$23,404	$24,101	$25,952

The contract for constructing a breakwater at Fairport Harbor, O., has been awarded to J. B. Donnelly, Buffalo, at the same figures as for the Conneaut Harbor work, except that stone filling is at $1.16, and brush mattresses 50 cts. a yd; total, $24,429.

BRICK PAVING.—Ann Arbor, Mich.—Geo. F. Key, Cy. Engr., informs us that the following contract was let June 1, 1899, to Wm. J. Clancy, Ann Arbor, for brick paving, as advertised in Engineering News: Brick, 5,250 sq. yds., $1.04; sand cushion, 5,250 sq. yds., 4 cts.; filler, 5,250 sq. yds., 17 cts.; curb stone, 3,225 sq. ft., 60 cts.; excavation, 12 ins. below finished grade, 1,750 cu. yds., 32 cts.; concrete, 875 cu.yds., $2.90; gravel trenching, under 6 ft. deep, 150 lin.ft., 30 cts.; 12-in. pipe, 150 lin.ft., 28 cts.; 4 inlets, each, $15; manhole, $40; catchbasin, $40; total, $11,882.

Bids Received at Chicago, Ill., June 15, 1899, for Improving Harbor.

Bidder.	Dredging, 1,000,000 cu.yds.	Piles—Removing, 50, each.	Piles—Furnishing, 78, 40 ft.long	Iron dredg ch'ns, 2,040 lbs.	Stone, 500 cords.	Total.
Lydon & Drews Co., Chicago, Ill.	8.95	$3.00	$12.00	8.0	$7.50	$94,499
Green's Dredging Co., Chicago, Ill.	9.25	3.50	10.00	7.5	7.50	97,358
Hausler & Lutz Towing & Dock Co., Chicago, Ill.	9.5	2.00	11.00	7.0	7.00	99,000
Chicago Star Construction & Dredging Co., Chicago, Ill.	7.0	1.75	8.50	8.0	5.75	73,789
Carkin, Stickney & Cram, Detroit, Mich.	12.75	2.15	12.00	8.0	6.75	132,082
Fitzsimons & Cornell Co., Chicago, Ill.	12.5	3.00	10.00	10.0	7.00	129,634

BRICK PAVING.—Coldwater, Mich.—The following contract has been let to T. C. Brooks & Sons, Jackson, Mich., for Trimble block paving, with cement filler: Riggs & Sherman, Engrs., The Nasby, Toledo, O.; P. H. Sweeney, Cy. Clk.: Sewer pipe—10-in., 330 ft., 26 cts. a ft.; 12-in., 450 ft., 33 cts.; 15-in., 530 ft., 43 cts.; catchbasins, 7 $14 each; manholes, 3, $22 each; inlets, 6, $3 each; cement curb, 1,680 ft., 29 cts.; retaining curb, 286 ft., 29 cts.; cement filler—C., 5,882, 7 cts.,T., 505, 9 cts.; tar filler, 6,387, 9 cts.; gutter plates, 1,000 lbs., 2 cts.; brick paving, concrete foundation, including grading, Trimble, 6,387 sq. yds., $1.19; extra gravel, 35 cts.; extra concrete, $2; material prices—gravel and sand, each 40 cts. on street; natural cement, 47 cts. a bbl.; Portland cement, $2.31 a bbl.; brick, 63 cts. a yd.

REPAIRING PIER.—Muskegon, and Grand Haven, Mich.—We are informed that the following lowest bid was received June 10, 1899, for repairing government piers at Grand Haven from Green & Wenzell, Green Bay, Wis.: Cut down and removing old work, 602 lin. ft., $1.25 a lin. ft.; furnishing and securing in place, white oak timber, 11,680 ft., B. M., $40 per M. ft.; white pine, 105,060 ft., $25; white pin plank and decking, 5,472 ft., $20; iron or steel drift bolts, 17,500 lbs., 3 cts. a lb.; screw bolts, 3,299 lbs., 3¼ cts.; tie rods, 13,310 lbs., 3½ cts.; spikes, 240 lbs., 3 cts.; stone, 309 cords, $7 a cord; edgings, 247 cords, $4; total, $8,186.——Piers at Muskegon, Mich., June 14. Lowest bid from Smith & Nelson, Muskegon: Cut down and removing old work, 694 ft., $1 a lin. ft.; white oak round piles, 6,834 ft., 30 cts.; white oak timber, 7,740 ft., B. M., $36; white pine timber, 59,814 ft., $25; white pine plank for sheet piles, 55,574 ft., $28; white pine plank and decking, 2,736 ft., $20; drift bolts, 6,460 lbs., 3½ cts.; screw bolts, 6,007 lbs., 3½ cts.; carriage bolts, 4,707 lbs., 3½ cts.; tie rods, 8,132 lbs., 3 cts.; spikes, 420 lbs., 3 cts; stone pier, 39 and 49, 80 cords, $4; new stone pier 42, 80 cords, $6; sand filling, 500 cu. yds., 30 cts.; total, $10,618.

MACADAM ROAD.—Monmouth, Ill.—The following contract has been let to Brodin & Dungan, Monmouth, for building a combined brick and macadam road: Brick, 3,111 sq.yds., 70 cts. a cq. yd.; sand, 475 short tons, 70 cts. a ton; crushed stone, 388 tons; $1.40; broken pottery ("chuck"), 388 tons, 35 cts; stakes, 2×2×18 ins. 1,750, $4 a 100; pine lumber, 3½ M. ft., $20 a M. ft. The estimated quantities are for 3,500 lin. ft. by 13 ft. wide, with 8 ft. of brick and 2½ ft. of macadam on each side; the cost is 95 cts. a lin. ft., grading not included. J. E. Miller, Cy. Engr.

BRICK PAVING.—La Salle, Ill.—W. F. McNamara writes us that the contract for 38,000 yds. of brick paving has been let to Berry & Welch, of Iowa City, Ia., at $1.14 a yd.

BREAKWATER AND DREDGING.—Newport, R. I.—Maj. D. W. Lockwood, U. S. Engr., Newport, received the following bids June 15, 1899, for dredging, etc.: Breakwater construction at Sakonnet Point, R. I.—E. S. Belden, Hartford, Conn., $1.19 a ton of 2,000 lbs.; William Beattie, Fall River, Mass., $1.69. Dredging Fall River Harbor, Mass.—J. P. Randerson, Albany, N. Y., 14½ cts a cu. yd.; F. H. Brainard, New York, 9¼ cts.; P. Sanford Ross, (Inc.), Jersey City, N. J., 9 cts. Jetty construction at Nantucket, Mass.—E. S. Belden, $1.47 a long ton. Dredging Taunton River, Mass.—Cole Bros., Fall River, Mass., 98 cts. a cu.yd.; J. P. Randerson, 99¼ cts. Dredging and removing bowlders at Woods Hole Harbor, Mass.—W. H. Beard Dredging Co., New York, $3.50 a cu. yd.; Chas. W. Johnson, Lewes, Del., $4.95; R. G. Packard Co., New York, $2.23; Cole Bros., $3.15.

INDUSTRIAL NOTES.

THE DICKSON MFG. CO., Scranton, Pa., is said to have secured a contract from the Turkish government for six dynamite guns.

THE BIGNALL & KELLER MFG. CO., Edwardsville, Ill., is reported to have shipped a quantity of pipe treading machines to Stockholm, Sweden.

THE ALCO-VAPOR LAUNCH CO., Jersey City, N. J., has been awarded the contract by the Treasury Department, Washington, D. C., for a 35-ft. revenue cutter.

THE E. P. ALLIS CO., Milwaukee, Wis., has the contract for a blowing engine weighing about 350 tons, for the Sulin Iron & Steel Co., Sulin, Russia, according to reports.

THE PECKHAM MOTOR TRUCK & WHEEL CO., Kingston, N. Y., is reported to have shipped a complete shop tool equipment plant to the Odawara Electric Ry. Co., Odawara, Japan. The equipment includes a 150-ton hydraulic press, a 20-in. stroke shaper, lathes, pneumatic hoists, etc.

G. P. NICHOLS & BRO., 1325 Monadnock Bldg., Chicago, selling agents for Pawling & Harnischfeger, have just received orders from the Chicago & North Western R. R. for one 50-ton and one 30-ton double trolley, overhead electric, traveling cranes, and one 5-ton single trolley crane for its new shops at 42d St.

THE MARION STEAM SHOVEL CO., of Marion, O., writes us that it is crowded with orders, and working full capacity day and night. Even though it can build eight steam shovels at once in its erecting shop, it can hardly keep up with its work, and has orders enough to keep it busy until next winter. It has some orders for delivery next spring.

EVANS, ALMIRALL & CO., 44 Dey St., New York, have opened an office at 1120 Monadnock Bldg., Chicago, Ill., to handle the Evans system of exhaust hot-water heating for central plants and factories. The new office will be in charge of Mr. F. N. Jewett.

THE AMERICAN CAR AND FOUNDRY CO., it is reported, has an order from the Terre Haute & Indianapolis R. R. Co. for 100 cars; also a contract from the C., B. & Q. R. R. Co. for 200 refrigerator cars. The former are to be built at the Terre Haute Works, at Terre Haute, Ind., and the latter at the Wells & French Works, at Chicago, Ill.

THE RARIG ENGINEERING CO., Columbus, O., has an order from the Cumberland Steel & Tin-Plate Co., Cumberland, Ind., for a Corliss engine for rolling mill work. The flywheel of this engine will weigh 100,000 lbs.——The company also has an order from the United States government for 16 12-in. 1896 model mortar carriages for coast defense. The company has just completed an order of 10 12-in. 1896 model mortar carriages for the same service.

THE WHITING AUTOMATIC PUMP CO., of Detroit, Mich., has recently put on the market a device for pumping water, consisting of a pump driven by a falling weight. The weight is raised by means of pulleys and the pump is so arranged as to operate only when water is being drawn from the piping system. One of the great advantages of the system is that the water remains in the well or cistern until wanted for use, thus obviating danger of freezing in cold weather or becoming very warm in summer, as might result where water is pumped to elevated tanks.

THE PULLMAN PALACE CAR CO., Chicago, Ill., has an order from the Railway Department of the government of Bavaria, for six cars for the Bavarian State Railway. ——A report states that Chevallier Boutell, representing an English syndicate of $150,000,000, invested in railways in the Argentine Republic and in street railways in Buenos Ayres, has placed a $5,000,000 order with the company. Heretofore the syndicate has bought exclusively in England. Now it has ordered of the Chicago company, coaches, parlor and buffet cars. It has ordered street cars for its tramways in the Argentine capital. These last will be equipped with motor, whether electric or pneumatic is not yet decided.

THE PIERCE-CROUCH ENGINE CO., manufacturers of gas engines, New Brighton, Pa., announces that its works are running full, with many orders ahead, and the following sales lately made: Rochester Tumbler Co., Rochester, Pa., two 50-HP. engines, being the third order received from this company; Freedom Water Co., Freedom, Pa., one 50-HP. engine, being the second engine to be installed at this plant; Warwood Tool Co., Wheeling W. Va., one 50-HP. engine, being the second sold this company; Pittsburg & Lake Erie R. R. Co., two 20-HP. and one 13-HP. engine, for pumping plants to be located at McKee's Rocks and Parke Station, on its lines; Wheeling Mold & Foundry Co., Wheeling, W. Va., one 25-HP. engine.

THE NEW ERA IRON WORKS, 37 Wayne Ave., Dayton, O., has orders for a 40-HP. and a 60-HP. gas engine for an electric lighting station for "The Algonquin," a 10-story apartment house being erected in that city. The gas engines, which will be belted to a jack shaft, will be enameled in white and gold, and will be placed in a finely finished portion of the basement, the walls, ceiling and floor of which will be tiled.——The company is also installing a 125-HP. gas engine in the straw-board mill of the Indiana Fibre Co., at Kokomo, Ind., and is building a 60-HP. gas engine for the Crescent Iron & Brass Works, Detroit, Mich.; a 60-HP. gas engine for the Jackson Knife & Shear Co., Fremont, O., and a 40-HP. gas engine for the Columbus Biscuit Co., Columbus, O.

THE AMERICAN WOOD FIREPROOFING CO., Bowling Green Bldg., New York, announces that it expects to put steam on in its new works at Newark, N. J., next week, and by the 1st of July should be in full readiness for treating all kinds of lumber, according to its special process. The recent Naval Board, appointed for the testing of fireproofed woods, to whom the company submitted samples, has reported favorably upon the work, and say that it is equal to any. This board reported favorably upon the processes of three companies, among the many submitting treated woods claimed to be fireproofed. The works are equipped with the most improved machinery, the cylinders, in which the wood is prepared, being made from ¾-in. flanged steel, and will test to a pressure of 400 lbs. to the square inch. These are 106 ft. long and 6½ ft. in diameter, inside measurement. The lumber is placed upon steel cars and treated on these in the cylinders. The capacity is 30,000 ft. a day for treating. The company also has three modern dry-kilns, especially adapted for kiln-drying treated wood. The company will soon be in position to answer inquiries as to accepting orders for treatment, as it much prefers to protect the lumber dealer, acting for him where bids are asked on fireproofed wood. It wishes as far as possible to confine itself to the work of treating the lumber and not merchandising the material, unless it may be on foreign inquiries, of which it has had a large number.

EXHIBITORS AT THE MASTER CAR BUILDERS' AND MASTER MECHANICS' CONVENTIONS.—The following are the names of the supply houses making exhibits at the annual conventions of the Master Car Builders' and Master Mechanics' associations, held at Old Point Comfort, Va., June 14-23, 1899. In each case the firm named has been listed under the heading of its most prominent exhibit or of the leading material handled by it:

Air-Brake Hose.—Boston Belting Co., Boston, Mass.; Boston Woven Hose & Rubber Co., Boston, Mass.; Peerless Rubber Mfg. Co., New York.

Air Compressors.—Rand Drill Co., New York.

Asbestos Goods.—H. W. Jones Mfg. Co., New York; Keasby & Mattison Co., Ambler, Pa.

Automatic Air and Steam Couplings.—Automatic Air & Steam Coupler Co., St. Louis, Mo.; Pettingill & Lamb, Denison, Ia.

Brake Beams.—Chicago Railway Equipment Co., Chicago; Monarch Brake-Beam Co., Detroit, Mich.; Oval Brake-Beam Co., Philadelphia, Pa.; Sterlingworth Railway Supply Co., Easton, Pa.

Brakes, Brake-Shoes and Brake-Slack Adjusters.—American Brake Co., St. Louis, Mo.; American Brake-Shoe Co., Chicago; Corning Brake-Shoe Co., Corning, N. Y.; Westinghouse Air-Brake Co., Pittsburg, Pa.

Carborundum.—Carborundum Co., Niagara Falls, N. Y.

Car Doors and Fittings.—American Grain & Car Door Co., Philadelphia, Pa.; Chicago Grain Door Co., Chicago; Dayton Malleable Iron Co., Dayton, O.; Jones Car Door Co., of Chicago; M. E. Kanaly Co., Cambridgeport, Mass.; Missouri Railway Equipment Co., St. Louis, Mo.; National Railway Specialty Co., Chicago.

Car Heating Systems.—Consolidated Car Heating Co., Albany, N. Y.; Gold Car Heating Co., New York.

Car Roofs and Roofings.—F. W. Bird & Sons, East Walpole, Mass.; C. B. Hutchins & Sons, Detroit, Mich.

Car Seats and Fittings.—Boston Artificial Leather Co., Boston, Mass.; Hale & Kilburn, Philadelphia, Pa.; Heywood Bros. & Wakefield, Boston, Mass.; Knitted Mattress Co., Canton Junction, Mass.; United States Railway Supply Co., New York.

Couplers.—Acme Railroad Equipment Co., St. Louis, Mo.; American Mfg. Co., New York; American Steel Foundry Co., St. Louis, Mo.; Buckeye Coupler Co., Columbus, O.; Gould Car Coupler Co., Corning, N. Y.; McConway & Torley Co., Pittsburg, Pa.; National Coupler Co., Chicago, Ill.; National Malleable Castings Co., Cleveland, O.; Railroad Supply Co., Chicago, Ill.; Smillie Coupler & Mfg. Co., Newark, N. J.; Standard Coupler Co., New York; Thornburgh Coupler Attachments Co., Detroit, Mich.; Washburn Coupler Co., Minneapolis, Minn.

Curtains, Upholstering, Etc.—L. C. Chase & Co., Boston, Mass.; Arnamite Veneer Co., New York; Pantasote Leather Co., New York.

Drill.—Waterbury Tool Co., Waterbury, Conn.

General Supplies.—Fairbanks, Morse & Co., Chicago; Western Railway Equipment Co., St. Louis, Mo.

Hand and Gasoline Cars.—Sheffield Car Co., Three Rivers, Mich.

Headlights and Signal Lamps.—Adams & Westlake, Chicago; Railroad Signal Lamp & Lantern Co., New York.

Injectors, Steam Gages and Valves.—Crosby Steam Gage & Valve Co., Boston, Mass.; Hancock Inspirator Co., Boston, Mass.; Jenkins Bros., New York; Manning, Maxwell & Moore, New York; Wm. Sellers & Co., Philadelphia, Pa.; Star Brass Mfg. Co., Boston, Mass.

Jacks.—Pearson Jack Co., Boston, Mass.; A. A. Norton, Boston, Mass.

Journal Boxes and Fittings.—American Dust Guard Co., Columbus, O.; Atlantic Brass Co., New York; Davis Pressed Steel Co., Wilmington, Del.; McCord & Co., Chicago; Weber Car Axle Box Co., San Francisco, Cal.; Universal Car Bearing Co.

Locomotive Sander.—Henry L. Leach, North Cambridge, Mass.

Lubricators.—Detroit Lubricator Co., Detroit, Mich.; Michigan Lubricator Co., Detroit, Mich.; M. & S. Oiler Co., Denver, Colo.

Paints.—Sherman-Williams Co., Cleveland, O.

Pipe Clamp.—Acme Pipe Clamp Co., St. Louis, Mo.

Platform Gates.—R. Bliss Mfg. Co., Pawtucket, R. I.

Pneumatic Tools.—Chicago Pneumatic Tool Co., Chicago, Ill.; Q. & C. Co., Chicago; Standard Pneumatic Tool Co., Chicago.

Replacing Frogs.—B. E. Tilden Co., Chicago.

Rubber Goods.—Diamond Rubber Co., Akron, O.; New York Belting & Packing Co., Ltd., New York.

Side Bearings.—Baltimore Ball-Bearing Co., Baltimore, Md.

Steel Cars.—Goodwin Car Co., New York, N. Y.; Pressed Steel Car Co., Pittsburg, Pa.

Trucks and Bolsters.—American Steel Foundry Co., St. Louis, Mo.; Cloud Steel Truck Co., Chicago, Ill.; Sterlingworth Railway Supply Co., Easton, Pa.

Wood-Working Machinery.—American Machinery Co., Grand Rapids, Mich.; Greenlee Bros. & Co., Chicago.

NEW COMPANIES.—Mount Sterling Telephone & Electric Co., Mt. Sterling, O.; $6,000; Clay Johnson, O. W. Loofborrow, I. S. Henkle, W. R. Richards, J. A. Miller, all of Mt. Sterling.

Automatic Elevator Door Device Co., East Orange, N. J.; $150,000; manufacture automatic devices for closing elevator doors; William H. Thompson, Duncan T. McLaren.

Illinois Electric Vehicle Transportation Co., Chicago, Ill. $10,000; Carl Meyer, Chas. R. Holden, Carey V. Rhodes.

Jenney Construction Co., East Orange, N. J.; $50,000; to manufacture automatic alarms and electrical apparatus; I. Hallam Jenney, Lucien W. Jenney, Elbert A. Brinckerhoff, Jr., Duncan T. McLaren.

American Electrical & Maintenance Co., New York; $50,000; A. K. Warren, F. J. Reilly, W. F. Reilly.

Scranton Bolt & Nut Co., Scranton, Pa.; $150,000; W. D. Zehender, Levanon; W. Connell, Scranton; L. M. Horton, Easton; J. Jemmyn, C. H. Welles, Scranton, and others.

Safety Car Coupler & Mfg. Co., St. Paul, Minn.; $10,000,000; W. B. Lyon, Gustav Willins, St. Paul, Minn.; E. B. Schermerhorn, Galena, Kan.

New York & Pennsylvania Paving Brick Co., Wilkes-Barre, Pa.; $1,000,000; K. W. Lyle, New York; J. W. Green, Perth Amboy, N. J.; F. A. Phelps, J. E. Sayre, G. W. Lewis, of Wilkes-Barre, Pa.

Miller Press & Machine Co., Woonsocket,; $20,000; to manufacture cotton and woolen machinery; G. W. Miller, J. J. Miller, F. L. Miller, Woonsocket, Mass.

Standard Heating & Boiler Co., Nashville, Tenn.; $25,000; H. T. Sinnott, A. J. Dyer, J. W. Smith, S. M. Sinnott, H. M. Smith, all of Nashville.

Washington Patro-Delius Electro Chemical Co., Seattle, Wash.; $250,000; to extract gold from quartz by special devices and chemical agencies; H. S. Sharpe, F. Sawyer and J. S. Wilson, all of Seattle.

Standard Incandescent Burner Co., Portland, Me.; $500,000; J. E. Sawyer, Melrose, Mass.; F. H. Jacobs, W. S. Ames, Boston, Mass.; G. W. Barber, Newton, Mass.

Gray-Smith Engineering Co., East Orange, N. J.; $50,000; John H. Gray, Wilbur F. Smith, Duncan T. McLaren.

Ajax Cement Co., Camden, N. J.; $100,000; John P. Lance, Michael C. Aulenbach, Jonathan C. Ihig.

New York Sewer Construction Co., New York; $3,000; William F. Cunningham, Phillip J. Kearns and Thomas Reagan, of New York.

Green River Telephone & Telegraph Co., Owensboro, Ky.; $5,000; H. K. Cole is the chief incorporator.

Mail Delivery Notice.

Special efforts are made to deliver our paper to its readers each week at the earliest possible moment. The largest binding and mailing establishment in New York begins work on Engineering News early each Wednesday evening, and all papers for Boston, Philadelphia and Washington are usually in the New York post-office by midnight; all Brooklyn and New York city papers by 3 o'clock—in ample time for the first delivery Thursday morning. The entire edition, including foreign copies, is in the mail soon after 6 o'clock Thursday morning. If your paper is not received promptly we advise that you make a complaint to your local post-office officials.

SEWER PIPE.

NOTICE TO CONTRACTORS.

WESTBORO, MASS.

Sealed proposals for removing about 1,950 lineal feet of 15-inch vitrified sewer pipe and furnishing and laying a like amount of 16-inch cast-iron pipe and doing other things pertaining to the reconstruction of a portion of the outfall sewer of the Westborough, Mass., sewerage system, will be received by the undersigned at their office until eight o'clock Monday evening, July the tenth, 1899.

Plans and profile will be on file and Specifications and Forms of Proposals may be obtained at the office of their Engineer, J. J. Van Valkenburgh, South Framingham, Mass., on and after the 27th day of June, 1899.

All bids must be made on the blank Form to be furnished for that purpose by the Engineer; and must give the prices proposed, both in words and in figures, signed by the bidder with full name and address, and endorsed "Proposal for Reconstructing Outfall Sewer."

The price offered is to cover all the expenses incidental to the completion of the work in full conformity with said Specifications.

Each bid must be accompanied, either by a bond with two sureties satisfactory to said Sewer Commissioners for the sum of three hundred dollars, according to Form to be obtained at the office of said Engineer, or by a certified check for the said sum payable to the order of the Treasurer of the Town of Westborough.

Notice will be sent by mail, post paid, to the address of the person to whom the contract may be awarded. If, within four days from mailing the said notice, the person to whom the contract is awarded does not appear before the said Sewer Commissioners at their office and execute the contract and give the security required by said Sewer Commissioners, he shall be deemed to have abandoned his bid, and the bond accompanying the same, or other security, shall be forfeited.

A bond for the faithful performance of the contract shall be required of the successful bidder to whom the contract may be awarded, in a sum and with sureties to be satisfactory to the Sewer Commissioners, but not exceeding the amount of the bid.

The work is to be begun within ten days after the execution of the contract, and to be completed on or before the 1st day of November, 1899, time being the essence of this contract.

The Sewer Commissioners reserve the right to reject any and all bids that may be offered for any reason satisfactory to them.

MICHAEL G. McCARTY,
FRANK V. BARTLETT,
HARRY W. KIMBALL,
Sewer Commissioners of the Town of Westborough, Mass. 25-1t

U. S. ENGINEER OFFICE, Mobile, Ala., June 20, 1899.—Proposals for furnishing and delivering Hydraulic Portland Cement, Gravel and Sand, at McGrews Shoal, Ala., received here until 12 o'clock, noon, July 20, 1899. Information on application. WM. T. ROSSELL, Maj., Engrs. 25-4t

SEWERAGE SYSTEM.

SOMERSET, PA.

Sealed proposals will be received by the Town Council of the Borough of Somerset, Pa., until 2 o'clock, p. m. of Wednesday, July 12, 1899, for the construction of 4.87 miles of sewers in sizes from 8 to 18 inches in diameter, 65 manholes, and 19 flushtanks.

Proposals must be submitted on blanks which, together with copies of the specifications, can be obtained from R. E. Meyers, Clerk of Council, or the Engineer, after July 1st.

Plans may be seen at the Council Chamber and information given by the Engineer.

The Council reserves the right to reject any or all proposals.

J. WATSON FREASE,
President of Council.
JAS. S. HARING,
Engineer. 25-1t

BRICK AND ASPHALT PAVING.

CHILLICOTHE, O.

Bids are asked until July 5th for paving with brick and asphalt.

H. M. REDD,
City Engineer.
25-1t

U. S. ENGINEER OFFICE, Army Building, New York, June 19, 1899.—Sealed proposals for dredging in Bay Ridge and Red Hook Channels, N. Y. Harbor, will be received here until 12 m., July 19, 1899, and then publicly opened. Information furnished on application. H. M. ADAMS, Major, Engrs. 25-4t

SEWERS.

HACKENSACK, N. J.

Sealed proposals will be received by the Hackensack Improvement Commission at the Commission Rooms, Mercer St., until 8 p. m., Monday, July 10, 1899, for constructing

About 465 ft. of flat top sewer, 5 ft. wide;
" 300 " " " " 6 " "
" 568 " of 24-in. pipe sewer;
" 538 " " 18-in. " "
together with manholes, catchbasins, etc.

Drawings and specifications may be seen and blank forms of proposals obtained at the office of Lemuel Lozier, Engineer, No. 1 Main St., Hackensack, after June 28.

Proposals must be made upon the blank forms furnished.

All proposals shall be accompanied by a certified check for Five Hundred ($500) Dollars, drawn to the order of the Hackensack Improvement Commission, as surety that if proposal is accepted, contract will be entered into.

The Hackensack Improvement Commission reserves the right to reject any and all bids.

M. E. CLARENDON,
President.
JACOB BAUER,
Secretary. 25-2t

U. S. ENGINEER OFFICE, Boston, Mass., May 27, 1899.—Sealed proposals for dredging in Powow River, Essex River, Manchester Harbor and Chatham Harbor, Mass., will be received here until noon, June 28, 1899, and then publicly opened. Information furnished on application. CHAS. R. SUTER, Col., Engrs. 22-4t

Nearly Every Prominent Contractor and Manufacturer of Contractors' Supplies READS ENGINEERING NEWS

AVAIL YOURSELF OF THIS PAPER WHEN BIDS ARE WANTED FOR CONSTRUCTION OR FOR FURNISHING SUPPLIES.

DRAINING SWAMP OR MEADOW LANDS.

NEWARK, N. J.

Sealed proposals will be received by the Board of Street and Water Commissioners of the city of Newark, N. J., on Thursday, July 20, 1899, between the hours of 3.30 o'clock and 3.45 o'clock p. m., at the place of meeting of the said Board, Nos. 128 and 130 Halsey street, in the said city of Newark, for the work of draining the swamp or meadow lands lying within the Ninth, Tenth and Twelfth Wards of the said city of Newark, pursuant to the provisions of an act entitled "A supplement to an act entitled 'An act to authorize the corporate authorities of cities and towns to drain meadow and swamp lands lying within their corporate limits,' approved April twenty-first, one thousand eight hundred and seventy-six," which supplement was approved March 20, 1899. Said sealed proposals to be accompanied by separate proposals for the repairing, rebuilding, maintenance and operation of said works or system of drainage for a term of ten years with the annual cost thereof.

Said proposals must be accompanied by plans showing the entire district to be drained and the location of tide-banks, dikes, dams, drains, pumping stations, sluices, sewer basins or other works and appurtenances to be built and constructed, together with detailed drawings and descriptions sufficient to make clear the essential features of the works which the bidder proposes to construct.

The water surface in the drains or ditches must be maintained at a level not less than six feet below the city datum at all points within the area of said swamp or meadow lands.

Pumping plants must be so arranged that the full capacity of the plant may be promptly brought into use in case of sudden storms. They must have a capacity to pump at least 900 cubic feet of water hourly for each acre of catchment tributary to the pumping station, and must show a duty test of at least 50 million feet pounds for each one hundred pounds of dry Cumberland coal or its equivalent in fuel consumed.

All tide-banks, canals, ditches, pumping stations and other works must be so located that the lands necessary for their construction and maintenance may be acquired and owned by the city.

Bidders must state the time in which the works included in their plan will be completed.

Bidders must state the cost for the entire work, and the periods of time in which payments thereon are required to be made to them by the city.

Bidders must also state the cost for the completion of any portion of the work, including a distinct drainage district, together with the periods of time in which payments thereon are to be made to them by the city.

Bidders must also state the cost for the annual maintenance, repairing and operation of the entire system of drainage works or of a complete drainage district, for a period of ten years from the date of the completion of the work, and the period of time in which payments thereon are to be required to be made to them by the city.

The said Board of Street and Water Commissioners reserves the right to reject any or all proposals, plans and estimates submitted under this advertisement.

Each bidder can procure a map of the city showing the extent and relative location of the swamps or meadow lands contained within the respective wards upon application in the Engineer's office at the City Hall.

In addition to the above, and with the object in view of obtaining the best plans for reclaiming, draining and improving the swamp or meadow lands within the corporate limits of the city of Newark, the Board of Trade in this city, through the Board of Street and Water Commissioners, offers the following prizes, namely: The sum of five hundred dollars ($500) for the best plans, with accompanying descriptions and estimates; three hundred dollars ($300) for the second best, and two hundred ($200) for the third best.

The plans are to be examined and their respective merits determined by two persons, one to be selected by the said Board of Trade and one by the said Board of Street and Water Commissioners, and upon the failure of said two persons to agree, they may select a third, when the decision of any two shall be final. Each competitor must inclose his name and address and a chosen number in a small sealed envelope, which is to accompany the plans and descriptions and estimates, all to be inclosed in a large sealed envelope or package, which is also to be marked with the same number as contained in the small sealed envelope. The small sealed envelope will not be opened until the plans, descriptions and estimates have been examined by the judges and their respective merits determined, whereupon the prize will be awarded. The plans, descriptions and estimates are to remain the property of the Board of Street and Water Commissioners.

WM. E. GREATHEAD,
Clerk of the Board.
25-4t Per ERNEST ADAM,
Engineer of Street and Sewer Departments.

ELECTRIC LIGHT PLANT

NOTICE.

SEYMOUR, IOWA.

Sealed proposals will be received by R. F. Greer, Town Clerk, for the material, machinery and construction of an electric light plant for the public and private lights of the Town of Seymour, Wayne County, Iowa, for which detailed specifications have been provided in sections, so that manufacturers of material and machinery and contractors may bid on such as they make a specialty of.

For specifications and further information address R. F. GREER, Town Clerk, Seymour, Iowa.

FRED. W. SALMON,
Engineer,
25-1t Burlington, Iowa.

ESSEX COUNTY PARK COMMISSION.

NOTICE TO CONTRACTORS.

Proposals for the construction of masonry and frame work shelters Nos. 1, 2 and 3, and public lavatory building, in Branch Brook Park, Newark, N. J., will be received at the office of the Essex County Park Commission, 800 Broad street, Newark, N. J., on Tuesday, the 27th day of June, 1899.

The Commission will be in session from 3.00 to 3.30 p. m. of that date to receive the proposals, which will not be received at any other time or place.

The proposals must be sealed and must be indorsed as follows:

"Proposals for construction of shelters Nos. 1, 2 and 3 and public lavatory building at Branch Brook Park, Newark, N. J."

Plans and specifications can be seen, and full information as to bidding obtained, at the office of the Essex County Park Commission, 800 Broad street, Newark, N. J.

The architects, Carrere & Hastings, will give necessary explanations or instructions to bidders at their office, No. 28 East 41st street, New York.

THE ESSEX COUNTY PARK COMMISSION,
25-1t A. CHURCH, Secretary.

STEEL BRIDGES.

NOTICE TO BRIDGE CONTRACTORS.

LIMA, OHIO.

Sealed proposals will be received by the City Clerk until 12 o'clock noon, of Thursday, July 6th, 1899, for the construction of two steel bridges over Ottawa River.

Each bridge shall be approximately as follows: Clear span, 80 feet; clear roadway, 26 feet; two sidewalks, each 7 feet clear; capacity of roadway and sidewalks (live load), 100 pounds per square foot; factor of safety, 4 to 6; steel joists.

Bidders must submit with their proposals drawings and specifications of bridges bid upon, and a preliminary bond or certified check on some Lima bank, in sum of $500, must accompany each bid.

25-2t C. E. LYNCH, City Clerk.

WATER-WORKS.

MICHIGAN CITY, IND.

Sealed proposals for the construction of a Water-Works System at Michigan City, Indiana, will be received at the office of the Secretary of Lake Michigan Water Company, at Michigan City, Indiana, until noon of the 30th day of June, 1899.

A pumping well and intake pipe 3,600 feet long, extending into Lake Michigan.

A river crossing and about 1,000 feet of 20-inch force main, and about 450 feet of 20-inch suction pipe, all in place and completed.

Each bid must be accompanied by a certified check for $1,000 as a guarantee of good faith, made payable to Martin T. Krueger, Secretary Lake Michigan Water Company.

Specifications may be obtained and the plans seen at the office of the City Civil Engineer of Michigan City, and also at the office of the Lake Michigan Water Company.

Proposals should be addressed to MARTIN T. KRUEGER, Secretary,
25-2t Michigan City, Ind.

WATER-WORKS.

TO CONTRACTORS.

WILLIMANTIC, CONN.

Proposals for Power Pumping Machinery for the Willimantic Water-Works will be received at the office of Thomas J. Kelley, 762 Main Street, Willimantic, Conn., until 2 o'clock p. m., Monday, the 24th day of July, 1899.

Each bid must be signed by the bidder and accompanied by a certified check for $500, conditioned for the execution of the contract (with satisfactory sureties for its performance) within the time specified in this advertisement, in case the bid be accepted.

The person, persons, or corporation to whom the contract may be awarded will be required to appear at said office with the securities offered by him, them, or it, and execute the contract within six days (not including Sundays) from the date of the notification of such award and the preparation and readiness for signature of the contract; and in case of failure to do so, he, they or it, will be considered as having abandoned it, and the check will be forfeited to the City of Willimantic.

The sureties upon the bond for the contract must be satisfactory to the Water Committee of said city.

The amount of security required will be fixed by the Committee aforesaid after the bids are opened, said amount to be not less than one-fourth nor more than one-half of the amount of the contract.

The said Water Committee also expressly reserve the right to reject any or all bids should they deem it for the interest of the City of Willimantic to do so.

TIME OF COMPLETION.

Bidders are required to state in their proposals the date on or before which they will guarantee to have the pump erected and ready to run in its regular service, also the date when it shall be ready for final acceptance.

Copies of the contract and specifications can be procured of the said Water Committee.

WILLIAM D. GRANT,
THOMAS J. KELLEY,
ROBERT E. MITCHELL,
Water Committee of the City of Willimantic.

Dated at Willimantic, Conn., this 20th day of June, A.D., 1899. 25-2t

STORM WATER CONDUIT.

EAST ORANGE, N. J.

PROPOSALS for the Construction of a Stone Water Conduit or Sewer in the Valley of Black Brook, East Orange, Essex County, N. J.

Sealed proposals for the above work, endorsed with the above title, also with the name or names of the person or persons making the same, and the date of presentation, will be received by the Township Committee of East Orange, New Jersey, at their public meeting room, No. 388 Main street, East Orange, N. J., on the tenth day of July, 1899, at eight o'clock p. m. The proposals must be delivered to Mr. Stephen M. Long, Township Clerk, not later than the date and time named, as no proposal received after that time will be opened or considered.

Bidders are required to state in their proposals, under oath, their names and places of residence; the names of all persons interested with them therein; and if no other person be so interested, they shall distinctly state the fact.

The proposal must be verified by the oath, in writing, of the party making such proposal, that the several matters therein stated are in all respects true. When more than one person is interested in the proposal, the verification must be made by all the parties interested.

Each proposal shall be accompanied by the consent, in writing, of two freeholders in the County of Essex, State of New Jersey, with their respective places of business or residence, to the effect that if the contract be awarded to the person making the proposal, they will, on its being so awarded, become bound as his sureties for its faithful performance; and that if he shall omit or refuse to execute the same, they will pay to the Inhabitants of the Township of East Orange any difference between the sum to which he would be entitled on its completion and that which the Inhabitants of the Township of East Orange may be obliged to pay to the person to whom the contract may be awarded at any subsequent or other letting; the amount in each case to be calculated upon the estimated amount of work by which the bids are tested. The consent above mentioned shall be accompanied by the oath or affirmation, in writing, of each of the persons signing the same, that he is a freeholder in the County of Essex, and is worth the amount of the security required for the completion of the contract, as stated in the proposals over and above all his debts of every nature, and over and above his liabilities as bail, surety or otherwise; that he has offered himself as surety in good faith, and with an intention to execute the bond required by law. The undertaking of a guaranty or trust company, duly authorized to make contracts of suretyship in New Jersey, and of satisfactory standing will be accepted in lieu of personal sureties. The adequacy and sufficiency of the surety offered will be determined by the Township Committee of the Township of East Orange.

The amount of security required is twenty thousand dollars.

N. B.—The Price must be written in the proposal, and also stated in figures, and all proposals will be considered as informal which do not contain bids for all items called for in these specifications, or which contain bids for items not called for therein. Permission will not be given for the withdrawal of any bid, and the right is expressly reserved by the East Orange Township Committee to reject any or all bids which may deem prejudicial to the public interests.

ESTIMATE OF QUANTITIES.

Approximate estimate of the work to be done is as follows:

Bailing and draining.
Rubble masonry and appurtenances:
11 cubic yards masonry.
24 lineal feet blue stone coping.
10 anchors.
Concrete—1,200 cubic yards.
Timber foundation—80 thousand, B. M.
Rock excavation—850 cubic yards.
Sewer 5 feet 6 inches in diameter—1,600 lineal feet.
Sewer 5 feet in diameter—2,100 lineal feet.
Sewer 4 feet 9 inches in diameter—1,340 lineal feet.
Sewer 3 feet 9 inches in diameter—700 lineal feet.
Sewer 3 feet 6 inches in diameter—540 lineal feet.
Pipe Sewer 1 foot 6 inches in diameter—1,500 lineal feet.
Manholes, 22.
Receiving Basins, 37.
Average length of connection to Receiving Basin, 65 feet.

Specifications, blank forms of proposals and further information, can be obtained on application, and plans for the work inspected at the office of the Engineer of the Township, Town Hall Building, No. 388 Main street, East Orange, N. J.

By order of the Township Committee.
STEPHEN M. LONG,
25-3t Township Clerk.

IRON OR STEEL WATER PIPE.

LANSINGBURG, N. Y., June 20, 1899.

Sealed proposals will be received at the office of the Board of Water Commissioners, Village of Lansingburg, N. Y., until 8 o'clock p. m., Thursday, July 6th, 1899, for Steel, Refined Iron or Cast-Iron Water Pipe, 14 inches inside diameter, of the following approximate lengths:

13,000 ft. to be under a head of 100 ft.
11,000 ft. to be under a head of 200 ft.

And about 17 tons of Iron Specials, according to specifications, which will be furnished upon application to the engineer.

Proposals to be indorsed either "Steel," "Refined Iron," or "Cast-Iron Water Pipe," according to bid submitted.

Bidders must use the printed forms furnished with the specifications.

By direction of the Board.
C. E. HICKS,
25-2t Engineer.

WATER-WORKS.

EAST JORDAN, MICH.

Bids for a complete Steam System of Water-Works for the Village of East Jordan will be received by J. J. Gage of said village, chairman of committee, up to and including the 10th day of July, 1899, at 7 o'clock p. m.

Specifications furnished upon application.
J. J. GAGE,
25-1t Chairman W.-W. Committee.

U. S. ENGINEER OFFICE, Wilmington, Del., June 10, 1899.—Sealed proposals for Dredging in Appoquinimink, Smyrna and Murderkill rivers, Delaware, will be received here until noon, July 10, 1899. Also proposals for erection of Pile Dikes at mouth of Mispillion River, Del. Information furnished on application. WM. F. SMITH, U. S. Agent. 24-4t

PROPOSALS FOR SNAGBOAT AND HULL.—U. S. Engineer Office, Little Rock, Ark., June 16, 1899.—Sealed proposals for furnishing one steel snagboat and one steel hull will be received here until noon, July 15, 1899, and then publicly opened. Information furnished on application. ROBERT McGREGOR, 1st Lieut., Engrs. 25-4t

U. S. ENGINEER OFFICE, Boston, Mass., June 20, 1899.—Sealed proposals for dredging in Plymouth Harbor, Mass., will be received here until noon, July 21, 1899, and then publicly opened. Information furnished on application. CHAS. R. SUTER, Col., Engrs. 25-4t